ORDER NO. VRD0203011C2

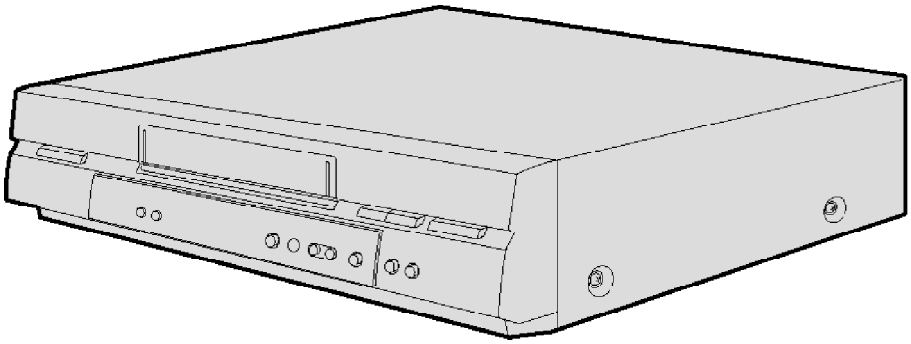
Service Manual

Video Cassette Recorder

Panasonic VHS PAL Hi-Fi

NV-FJ632EE

Z-MECHANISM



SPECIFICATIONS

SPECIFICATIONS

ITEM	SPECIFICATION
POWER	SOURCE: 220-240 V AC 50/60 Hz
	CONSUMPTION: 18 watts COMSUMPTION WHEN IN STANDBY MODE: Approx. 3W
RECORDING SYSTEM	2 rotary heads, helical scanning system
	PAL
TV TUNER SYSTEM	VHF: CHE2-CHE12 (PAL/SECAM B) CHR1-CHR12 (SECAM D) UHF: CH21-CH69 (PAL/SECAM G, SECAM K, PAL I) CATV: CHS01-CHS41 (PAL/SECAM B) 44MHz-470MHz (SECAM B)
RF OUT SYSTEM	UHF: CH21-CH69 (PAL/SECAM G, SECAM K, PAL I) 71 ± 3 dBμ, 75 Ω close
VIDEO	HEADS: 4 rotary heads 1 pair for recording and playback (L-R heads) 1 pair for trick play (L'-R' heads)
	INPUT: EURO AV (AV1/AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω terminated
	OUTPUT: EURO AV (AV1/AV2) Connector (21 pin) 1.0 Vp-p, 75 Ω terminated

ITEM	SPECIFICATION
AUDIO	HEAD: 1 Stationary head (Normal-mono only) 2 channels (Hi-Fi Sound-Stereo)
	INPUT: EURO AV (AV1/AV2) Connector (21 pin) More than -6dBV (500 mV), 10 kΩ
	OUTPUT: AUDIO OUT Connector (Phono type) -6 dBV (500mV), Less than 1kΩ EURO AV (AV1/AV2) Connector (21 pin) -6 dBV (500mV), Less than 1kΩ
TAPE SPEED	SP: 23.39 mm/s LP: 11.695 mm/s EP: 7.796 mm/s Record/Playback Time: SP: 4 hours with 240 min. type tape LP: 8 hours with 240 min. type tape EP: 12 hours with 240min. type tape FF/REW Time: 60 sec. with 180 min. type tape
OPERATING TEMPERATURE	5°C - 40°C
OPERATING HUMIDITY	35% - 80%
DIMENSIONS	430 (W)×87(H)×282(D) mm
WEIGHT	3.5 kg
STANDARD ACCESSORIES	1 pc. DIN-RF Cable 1 pc. AC Mains Lead 1 pc. Infra-red Remote Controller

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Panasonic

1. INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service this model.
If the circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original service manual.

Note:
Adjustment procedures, Disassembly Procedures and Assembly Procedures for Mechanism Chassis are separate volume from this service manual.
Please refer to the service manual for Z-Mechanism Chassis. (Order No. VRD9802005C2)

2. GENERAL DESCRIPTIONS

2.1. SERVICE CAUTION

2.1.1. REPLACING IC7702/EEPROM

When the EEPROM: IC7702 is replaced, applicable model code, option code and electrical adjustment data will not be available.
Therefore, enter and/or adjust the necessary data after replacing IC7702 by referring following procedure.

STEP1.REPLACE THE IC7702

1. Remove the C.B.A. with Mechanism unit by referring the Disassembly procedure.

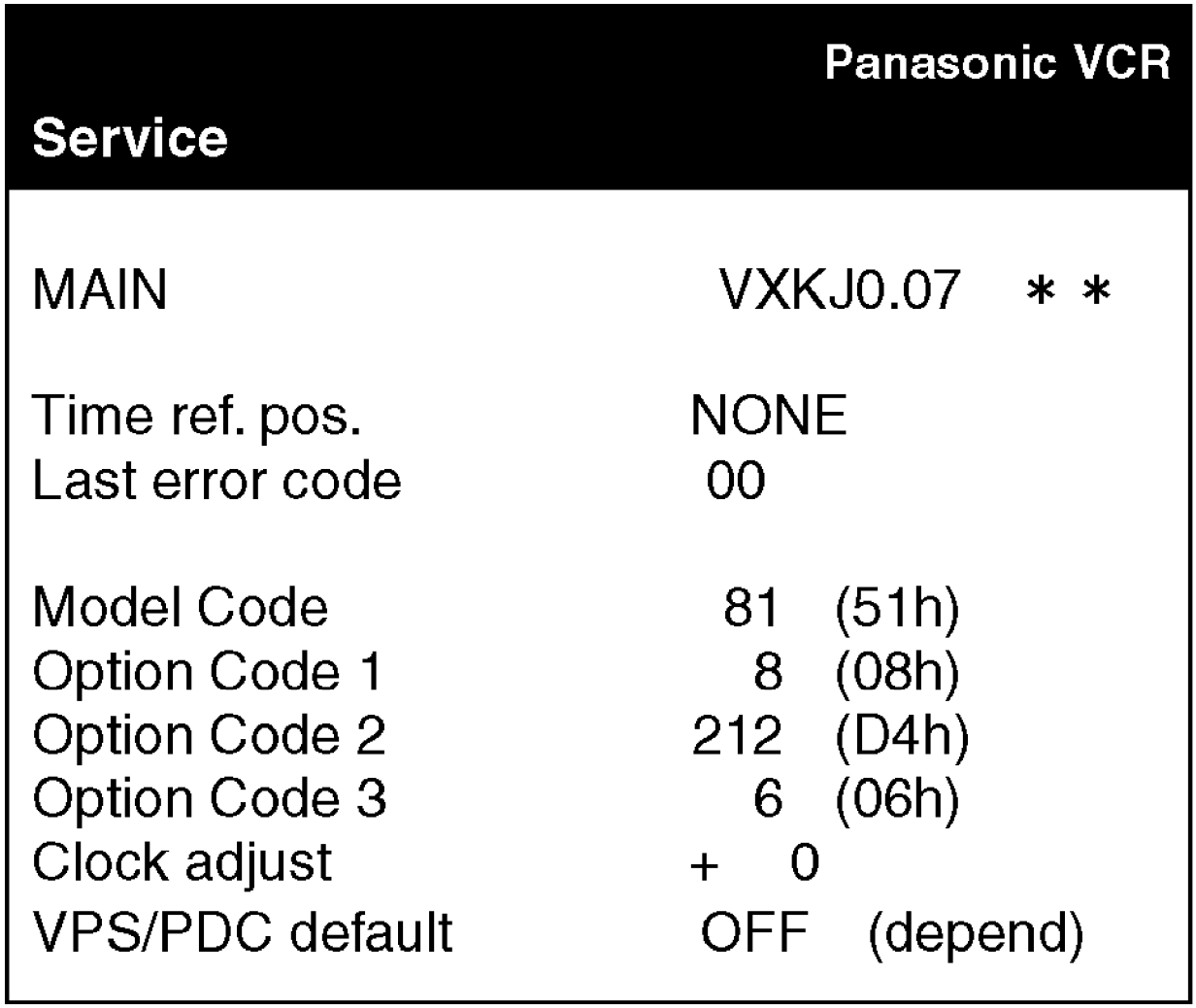
2. Disconnect the AC plug and replace the IC7702.

STEP2.INPUT THE MODEL & OPTION CODE

1. Set up the applicable model code and option code by ordering the following table.

PROCEDURE	F.I.P. DISPLAY
Turn on the Service Mode **1.Press the FF key and the EJECT key simultaneously for more than 3 seconds.**	
Activate the Service Mode 2 **2.While keep placing FF key, press the EJECT key in twice.**	
Activate the Entering Mode. **3.Press the EJECT key for more than 3 seconds.**	
Set the Mode 2. **4.Press the CH UP key in twice.**	
Display the Setting Code. **5.Press the POWER Button to turn the power on.**	 **(Colon starts flashing)**
Enter the Model and Option Code. **6.Service Screen is displayed on the monitor.** **7.Set the applicable Model and Option code by using REW, PLAY, STOP and FF keys on theRemote Controller. (See Fig.S1 & S2)**	
Exit from Service Mode. **8.Press the POWER Button to turn the power off.** **9. Press FF and EJECT keys simultaneously in 6 times.**	 **(Normal Indication)**

Fig.S1 Service Secreen (sample)



Model No.	Model Code	Option Code 1	Option Code 2	Option Code 3
NV-FJ632EE	86 (56h)	8 (8h)	212 (D4h)	6 (6h)

Fig. S2 Model Code & Option Code

NOTE:
Since all electrical adjustments data is still not available, perform the Electrical Adjustment continuously.

2.1.2. CYLINDER UNIT REPLACEMENT

1. CYLINDER UNIT REPLACEMENT

A. Remove the mechanism unit from MAIN C.B.A./Chassis by referring

"SECTION 2. Disassembly Procedure".

B. Remove the 3 screws (A) of the CYLINDER UNIT with a screw driver.

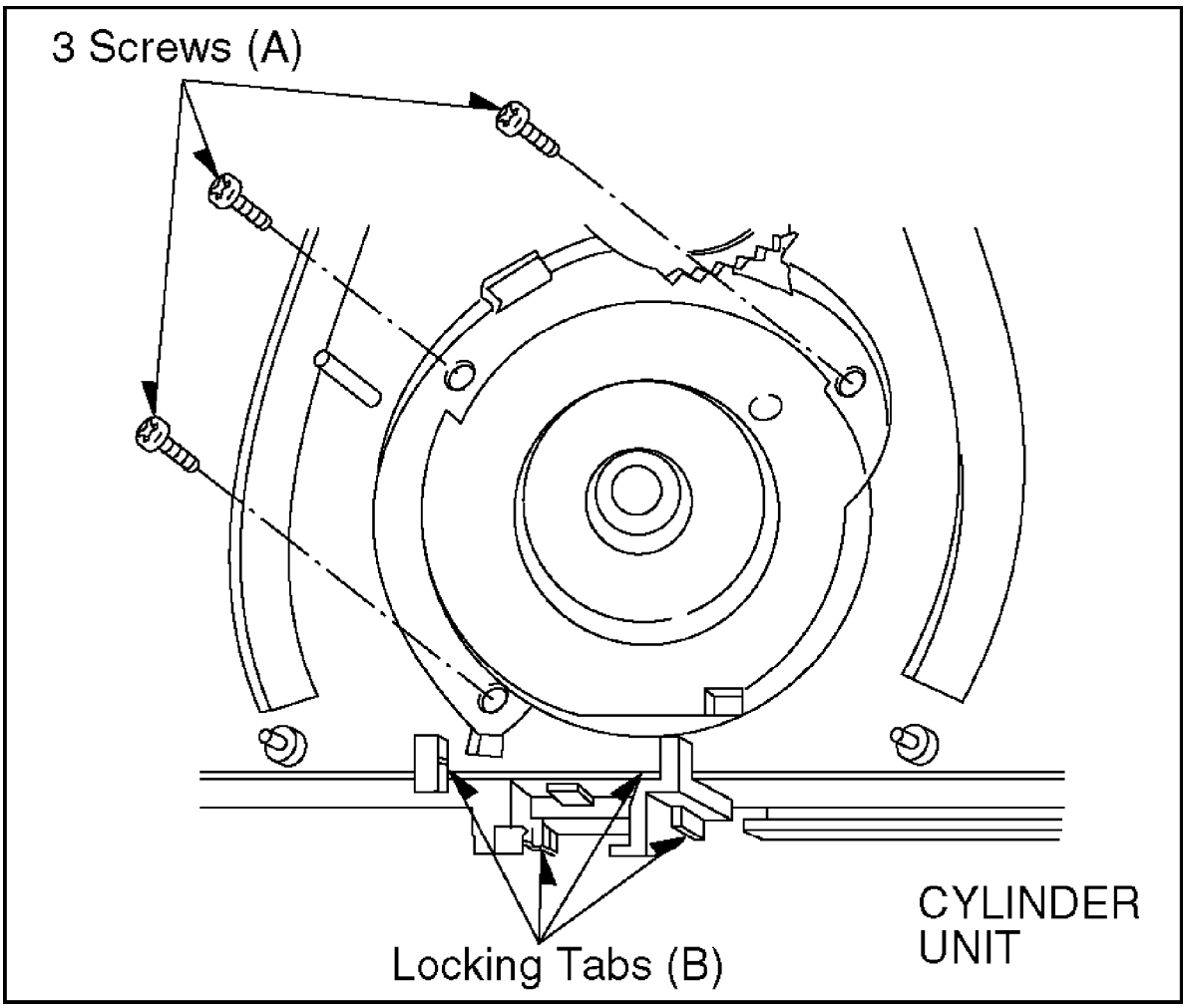
C. Unlock the 4 locking tabs (B) and disconnect the Cylinder flexible card from the FPC Holder.

D. Remove the CYLINDER UNIT.

CAUTION:

Handle the Cylinder flexible card with care. When it damaged, you should replace whole Cylinder unit.

Fig. S3



2. UPPER CYLINDER DISASSEMBLY

A. Remove 2 screws (A).

B. Remove the Cylinder Stator Unit.

C. Remove 2 screws (B).

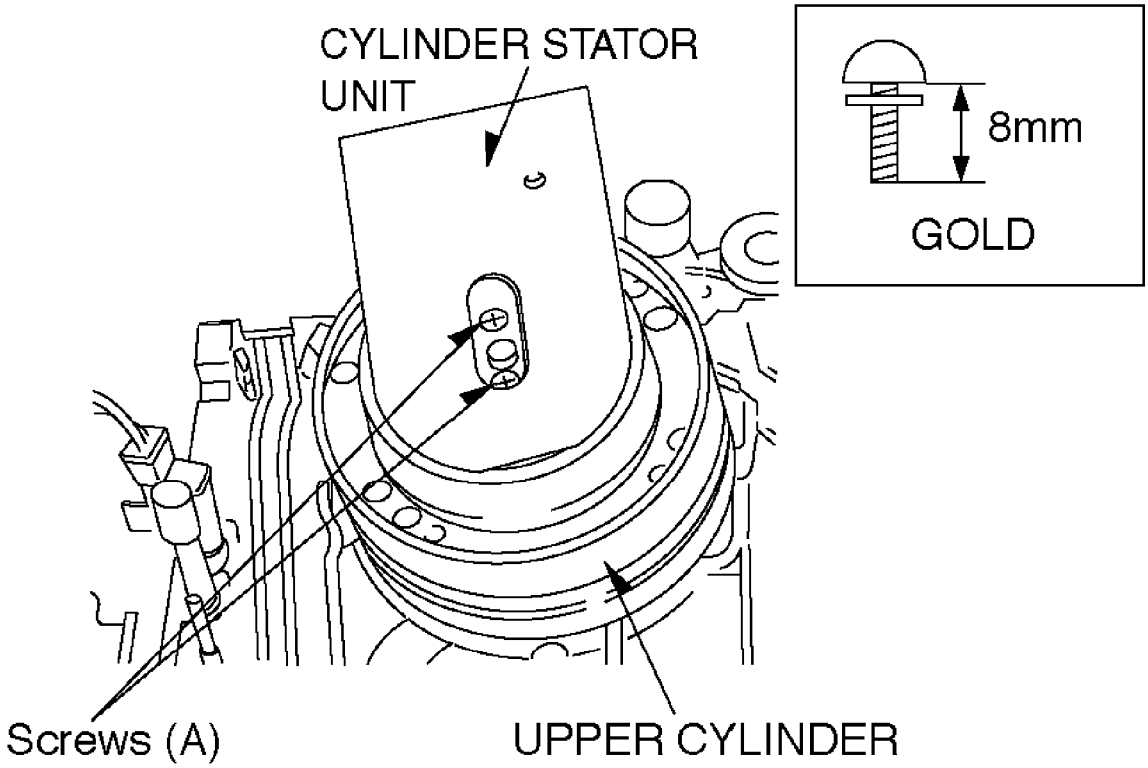
D. Remove the Cylinder Rotor Unit.

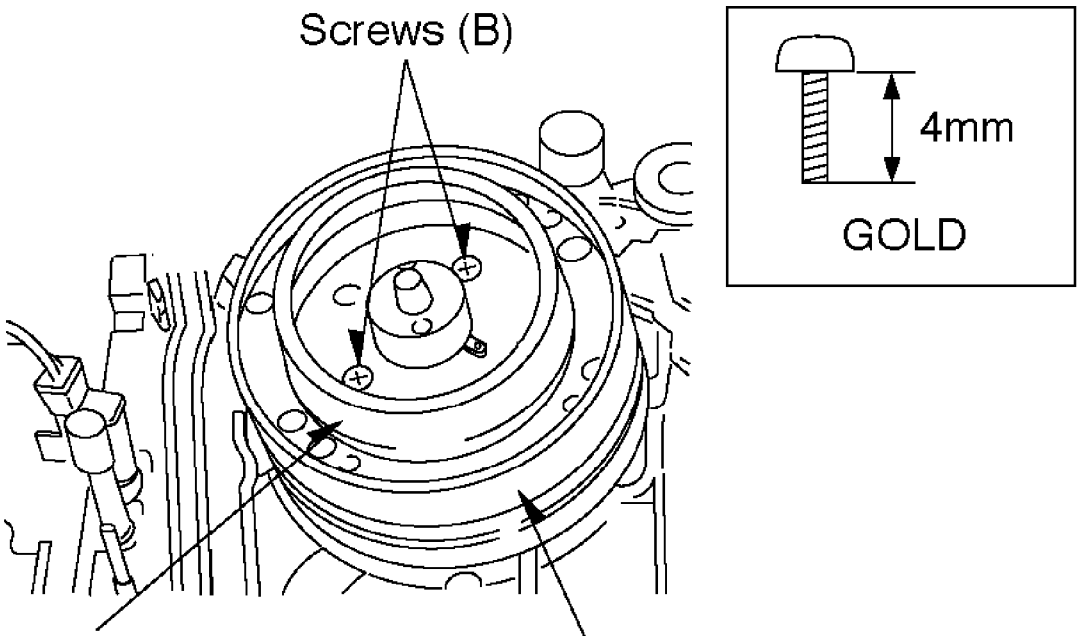
E. Loose Hex screw (C) (1.5 mm) and remove the CYLINDER RETAINER.

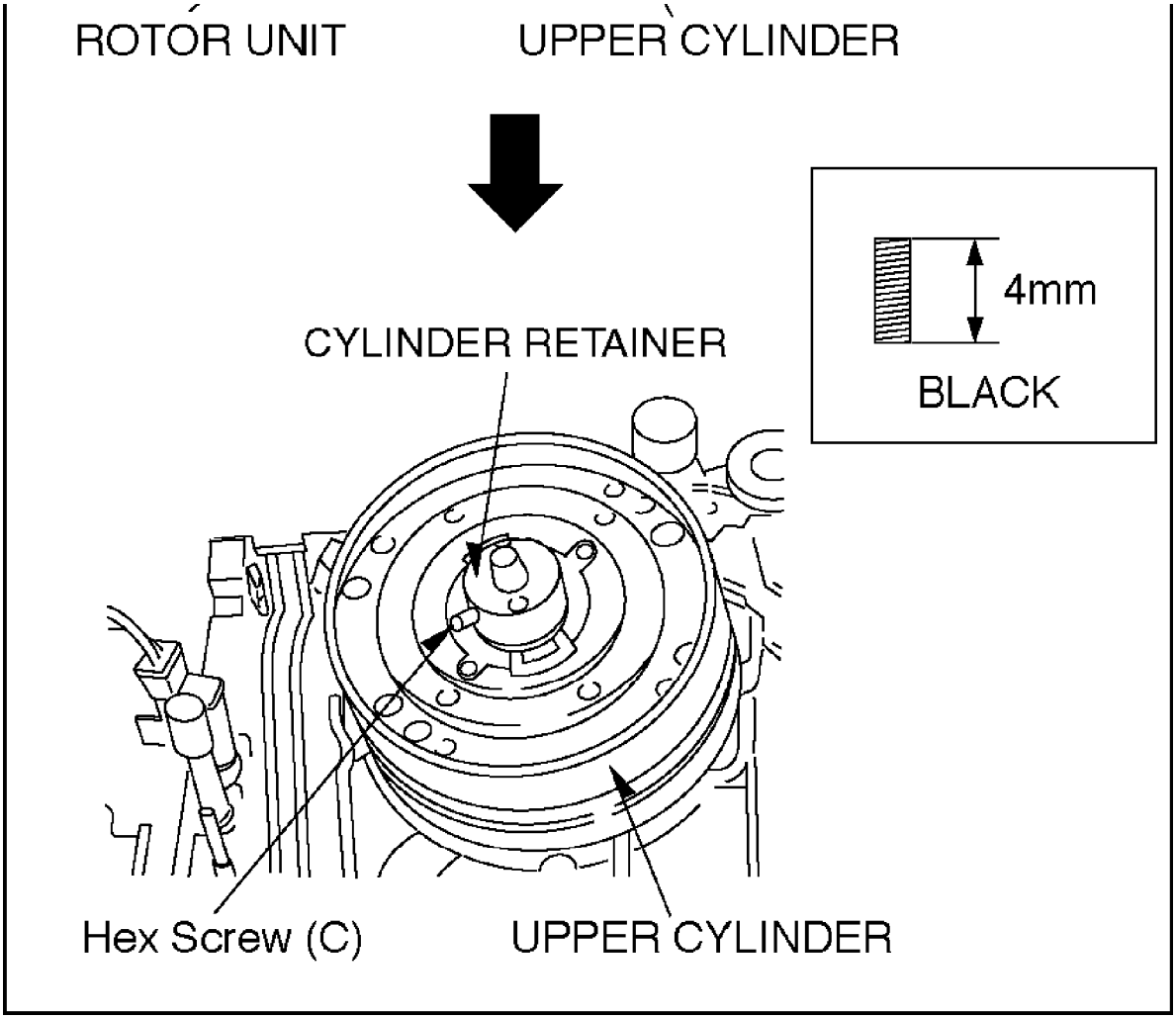
F. Remove the Upper Cylinder.

Fig. S4

TOP VIEW


CYLINDER STATOR
UNIT
8mm
GOLD
Screws (A)
UPPER CYLINDER


Screws (B)
4mm
GOLD



3. UPPER CYLINDER ASSEMBLY

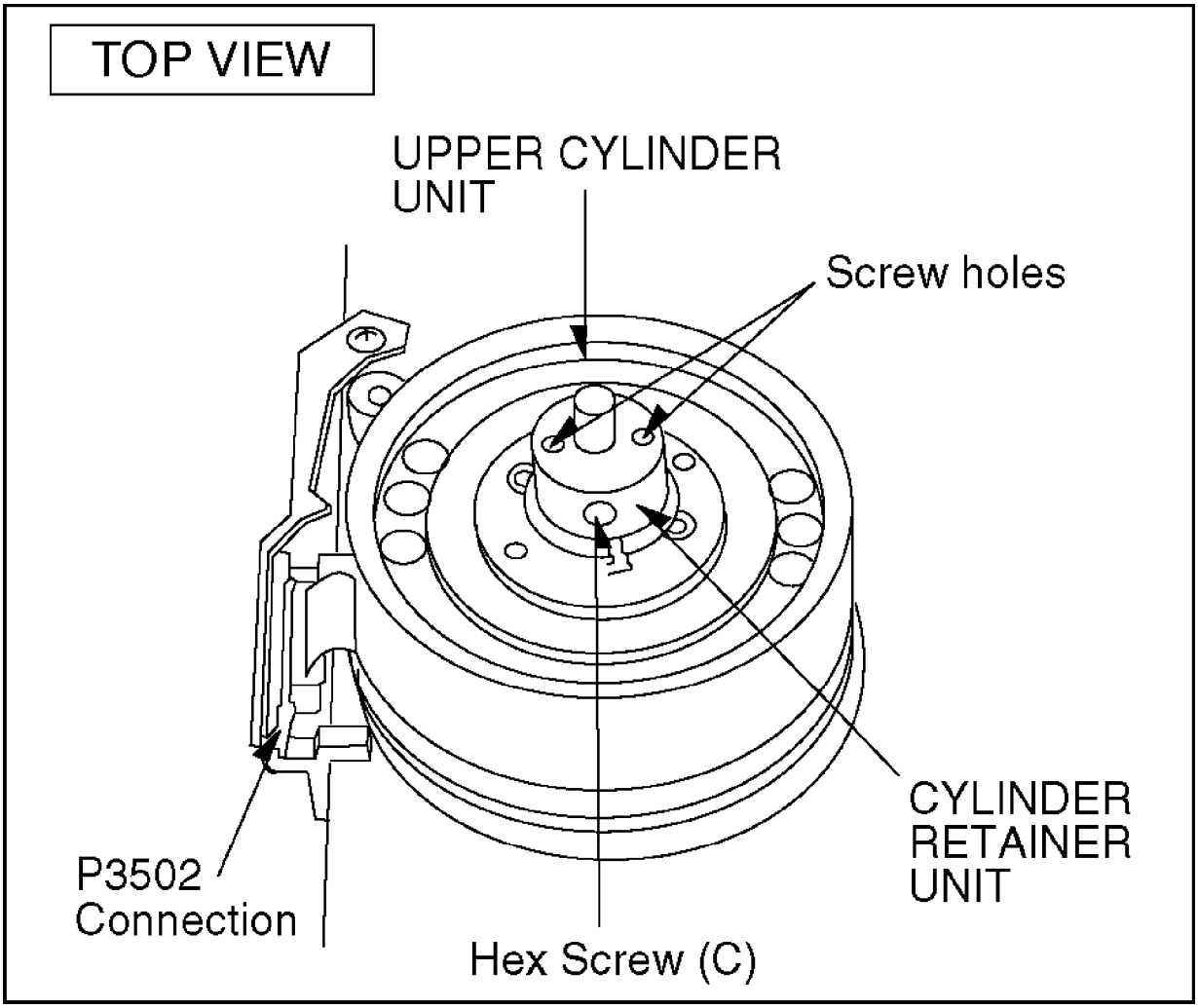
When reassembling, perform the steps in the reverse order.

Notes:

1. Install the Cylinder Retainer so that the 2 holes on top of the Cylinder Retainer are at right angles with the P3502 Connection.

2. Tighten the Hex screw (C) (1.5 mm) while pressing down on top of the Cylinder Retainer.

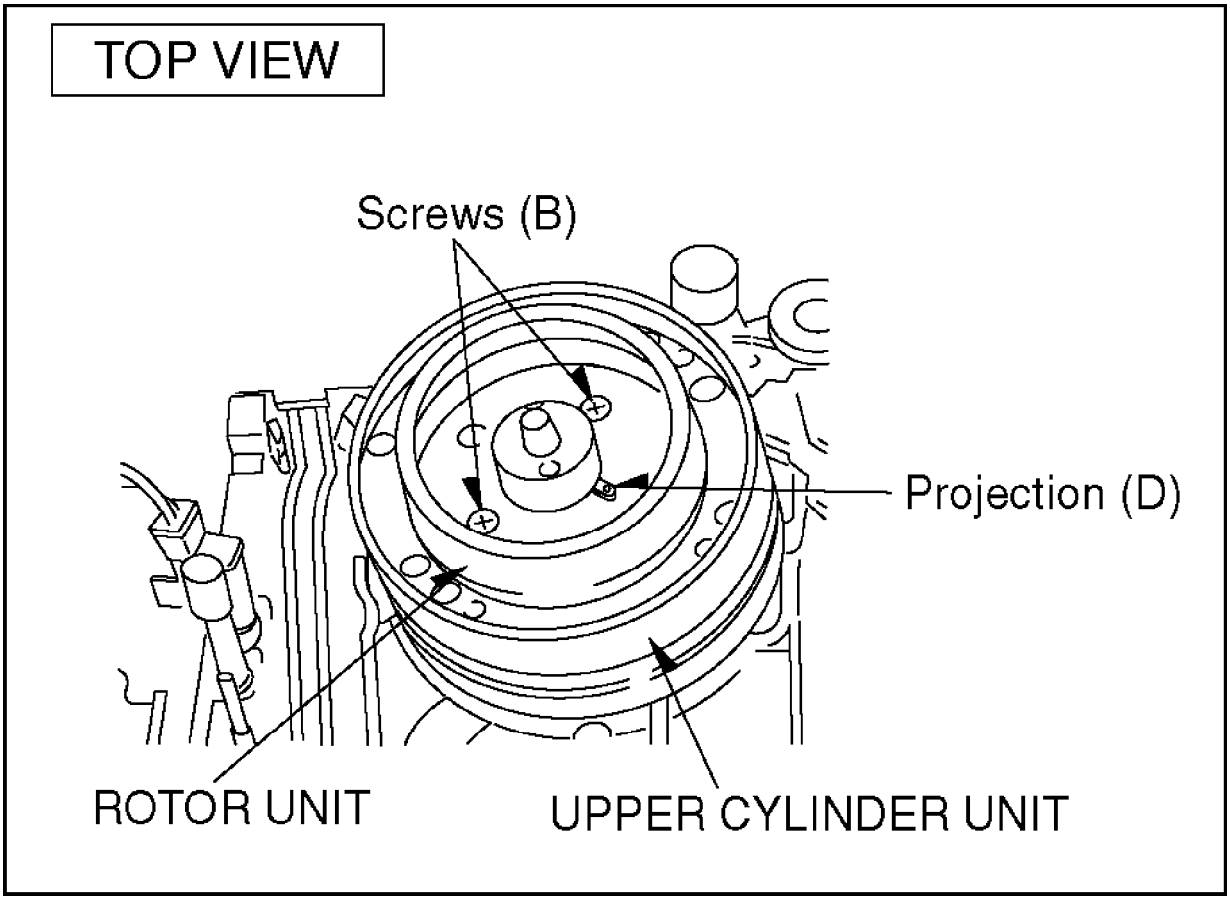
Fig. S5



3. Install the Cylinder Rotor Unit so that the inner hole of the Cylinder Rotor Unit fits to the small projection (D) on top of the Upper Cylinder.

4. Tighten 2 screws (B).

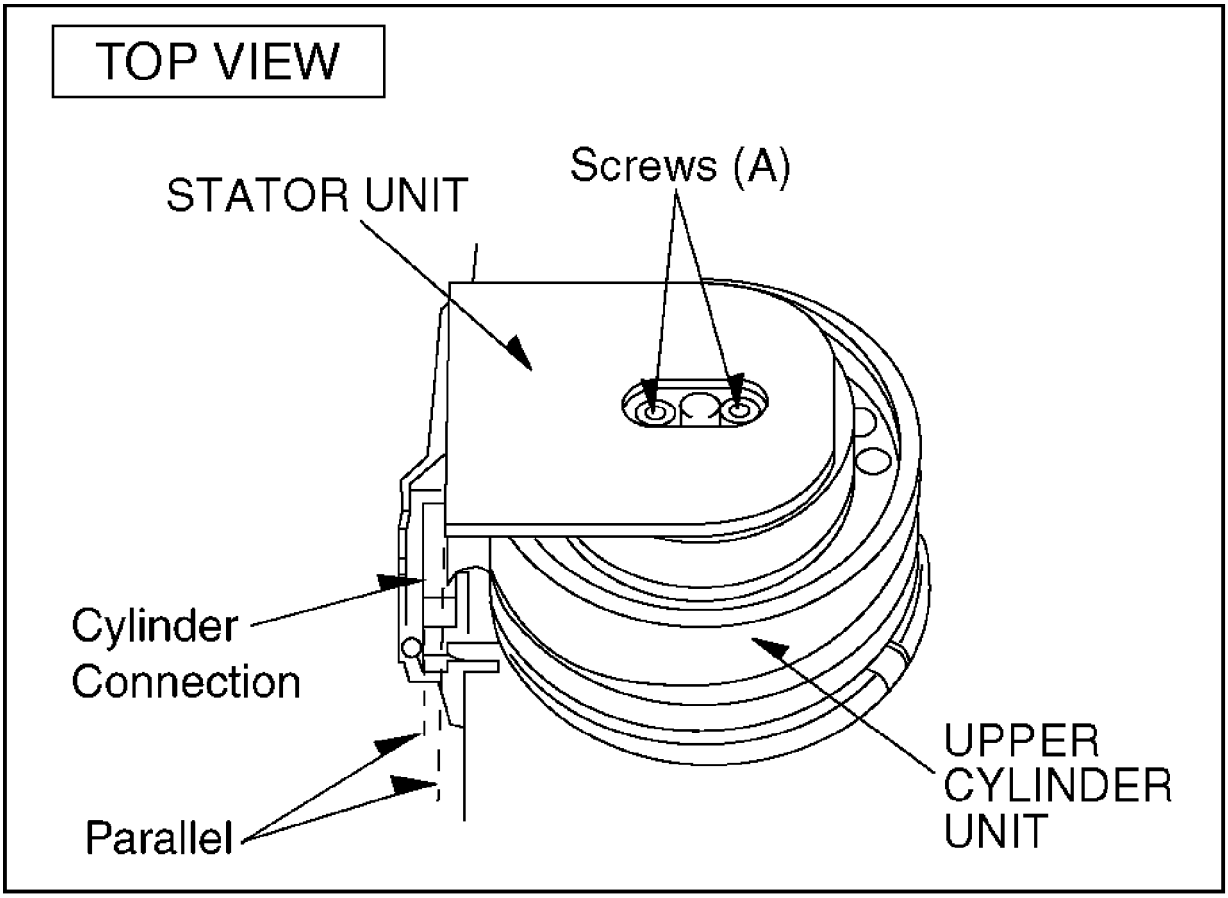
Fig. S6



5. install the Cylinder Stator Unit.

6. Tighten 2 screws (A).

Fig. S7

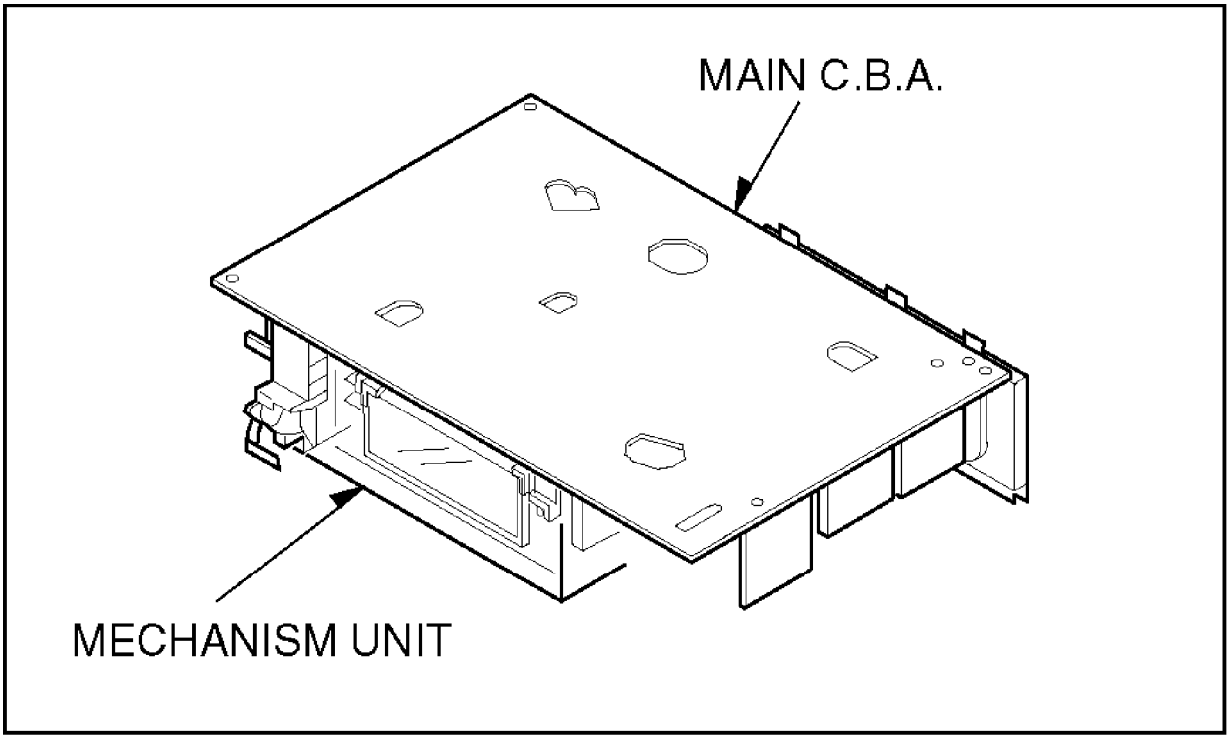


7. Confirm the PG SHIFTER ADJUSTMENT with the alignment tape (PAL: VFJ8125H3F) and adjust it if necessary.

2.1.3. CHECKING OF MAIN C.B.A.

When servicing the MAIN C.B.A., take out the MAIN C.B.A. and mechanism from the frame and turn over.

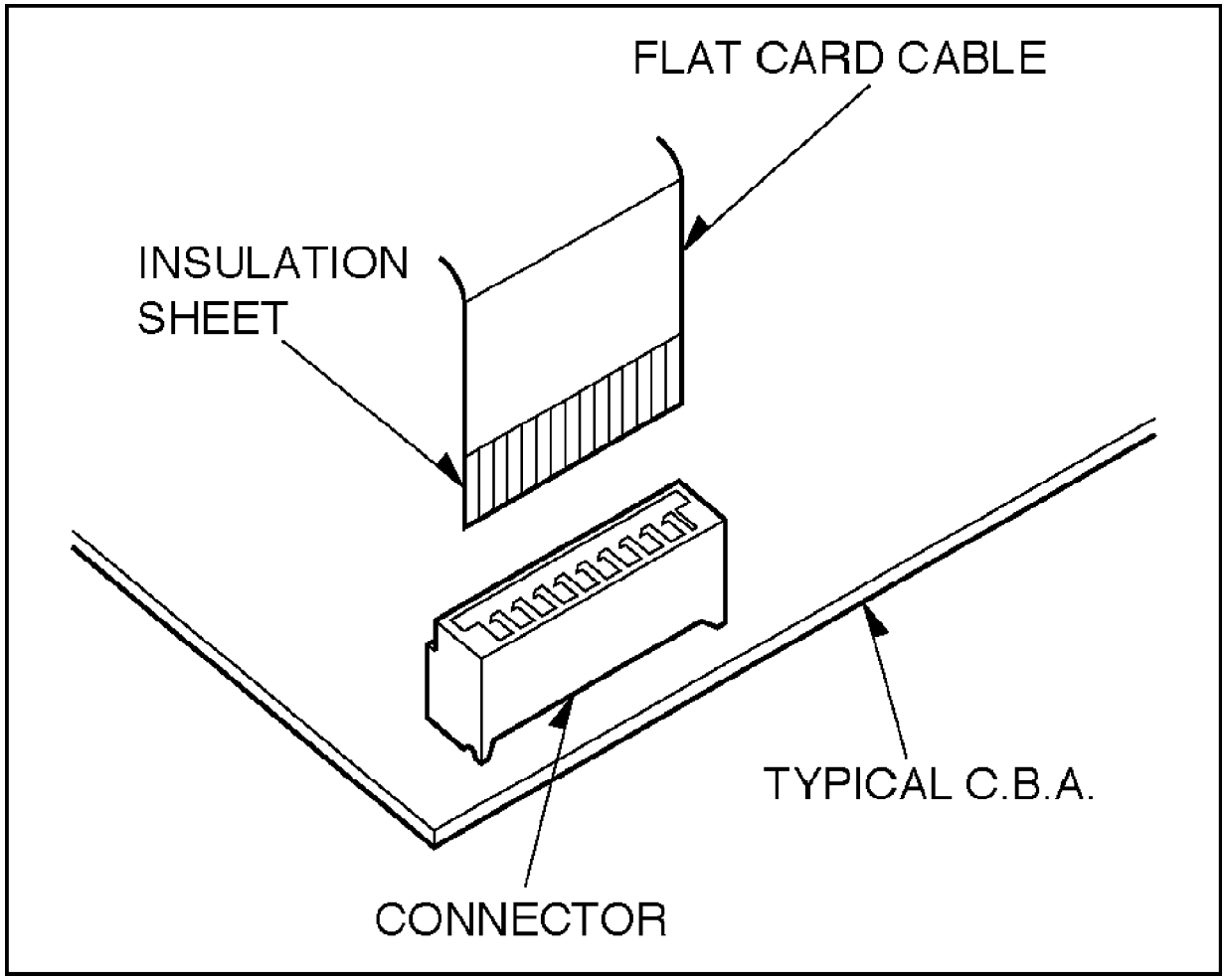
Fig. S8



2.1.4. FLAT CARD CABLE INSTALLATION

When installing the Flat Card Cable on the connector, install the Flat Card Cable with the cable contacts facing the connector contacts.

Fig. S9



2.2. REMOVAL OF CASSETTE TAPE

There are 2 ways to remove a cassette tape.

1. Service Information Display Operation

A. Press the FF and EJECT keys simultaneosly for 3 seconds and set the Service Mode 7.

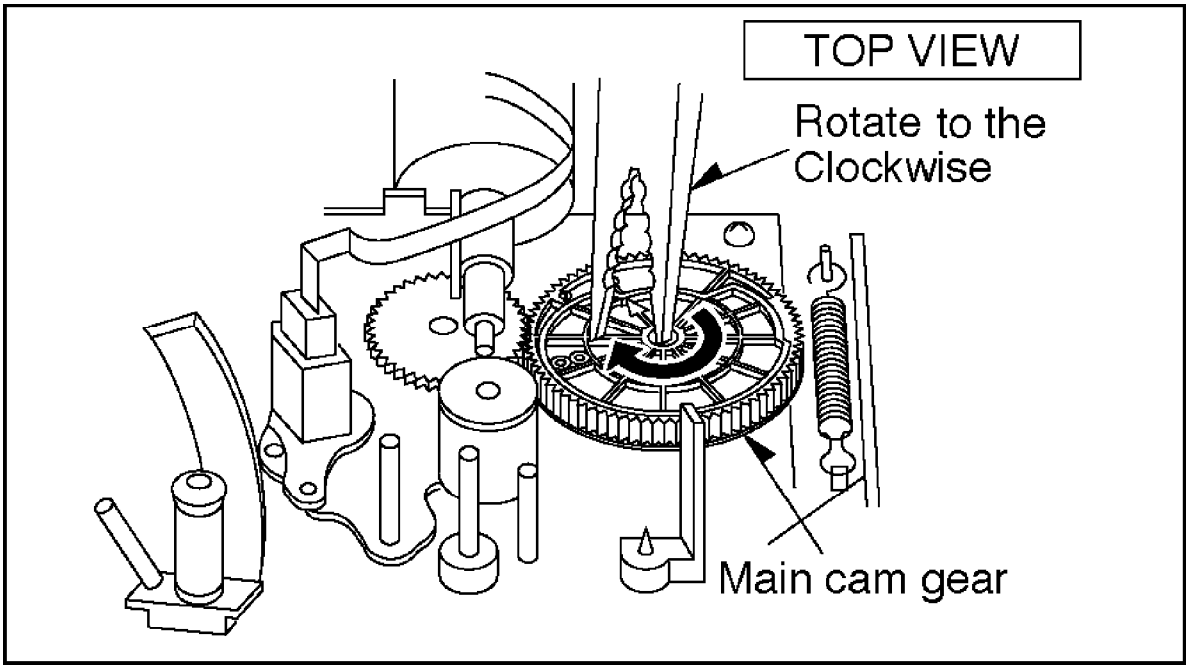
B. Press STOP key in order to rotate the Loading Motor for unloading operation. (Pay an attention of tape slack)

2. Manual Operation

A. Disconnect the AC Mains Lead and remove the Top Panel.

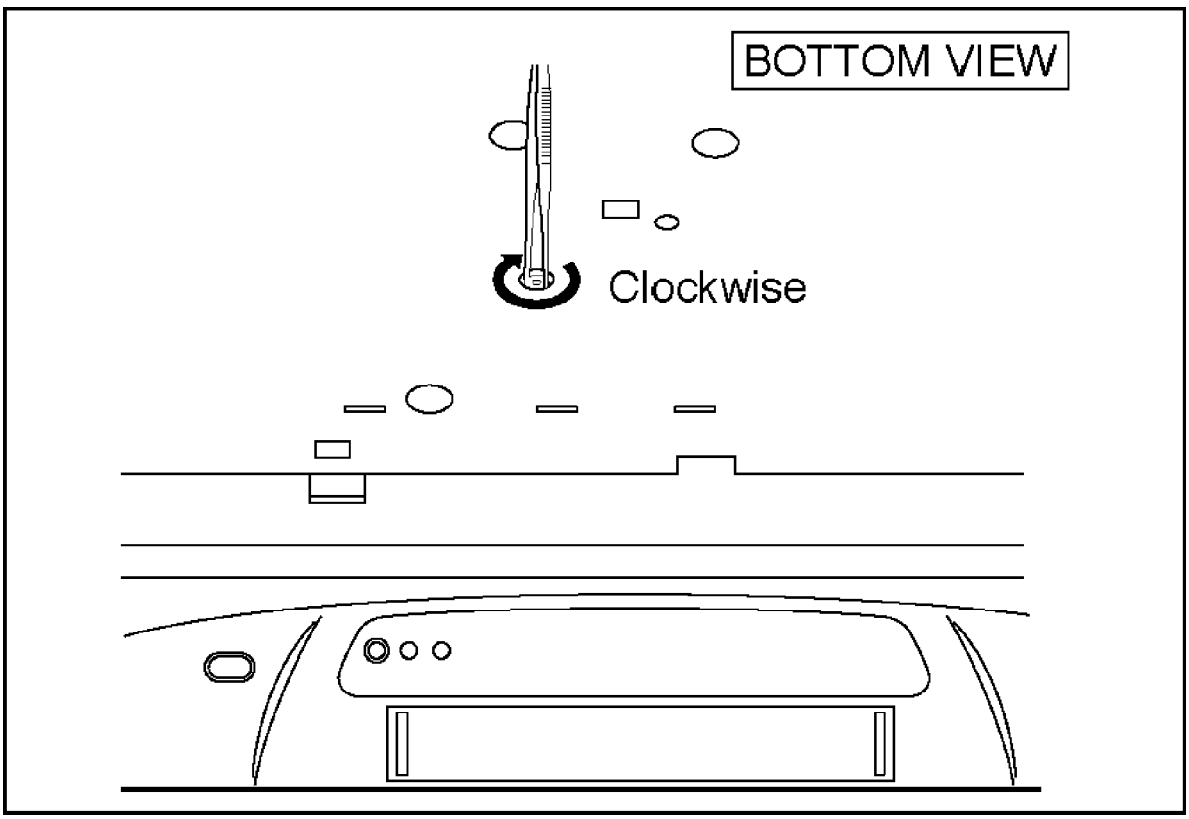
B. Rotate the Main Cam Gear clockwise until the Loading Posts move to fully unloaded position as shown in Fig. S10. (Tape is remaining)

Fig. S10



C. Rotate the Capstan Motor clockwise from the bottom side to take up the tape.

Fig. S11



D. Rotate the Main Cam Gear clockwise until the cassette tape is ejected.

2.3. INTRODUCTION OF VIDEO HEAD CLEANING CASSETTE

(POLISHING TYPE)

1. **We are pleased to introduce Panasonic Video Head Cleaning Cassette, VFK0923FT [for service purposes] and VFK0923FSE [for end users] for all VHS /SVHS VCP and VCR.**
2. **These cleaning cassettes are exclusive removing the hard and sticky clogging on video heads.**
3. **These improve the efficiency of video head cleaning service and shortening cleaning time for end users.**

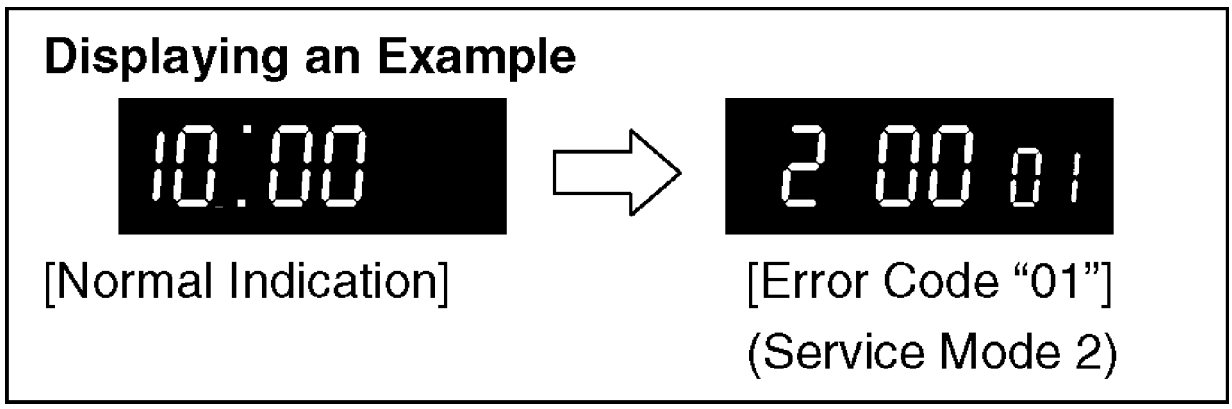
VFK0923FT (For Service usage)	
Type of Cassette	**Full VHS Cassette**
Cleaning Time	**10 Seconds/Time**
Tape Length	**20 m**
Usability in a Path	**180 Times**

VFK0823FSE (For end users)	
Type of Cassette	Full VHS Cassette
Cleaning Time	10 Seconds/Time
Tape Length	3.34 m
Usability in a Path	30 Times

Note:
The tape material itself is the same in both types.

2.4. SELF-DIAGNOSIS RESULT DISPLAY

The "SELF-DIAGNOSIS RESULT DISPLAY & MEMORY function is built in this VTR.
It means that when the VCR detects undesirable condition, it can be displayed a “Error code (Two numbers from the right)” with Service Mode 2.
Since the "Error code" is stored in the EEPROM, it can be displayed although after disconnected the AC leads. It can be displayed with Service Mode 2.
(If a second error had been detected, only the most recent error is displayed.)
For more details, refer to the Service Manual for Z-Mechanism Chassis Order number VRD9802005C2.



DICATION	CAUSE	REMEDY/CHECK
	After cylinder lock is detected, the cylinder does not start rotating again even after tape unloading.	Check the cylinder motor drive circuit.
	Cassette tape is not wound up during the tape unloading except EJECT mode.	Check the capstan motor drive circuit.
	Mechanism locks during mode transition except EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment. 3. Check the mode switch.
	Mechanism locks during tape unloading.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment.
	Mechanism locks after tape unloading in EJECT mode.	1. Check the loading motor drive circuit. 2. Check the mechanism phase alignment for cassette holde
	During recording mode, recording signal is less than the normal condition.	Protection of the over-current flowing in transistor which produces the power suppl for recording mode.
	Recording circuit works except recording mode.	Check the recording circuit.
	Cylinder lock detection.	Check the cylinder unit and the cylinder mc drive circuit.
	Supply reel mechanism lock detection	Check the supply reel mechanism and the supply reel circuit.
	Take-up reel mechanism lock detection	Check the Take-up reel mechanism and the Take-up reel circuit.
	PG shifter automatic adjustment error.	Check the servo/system control circuit and cylinder unit.

Fig. T1 Self-Test indication Display

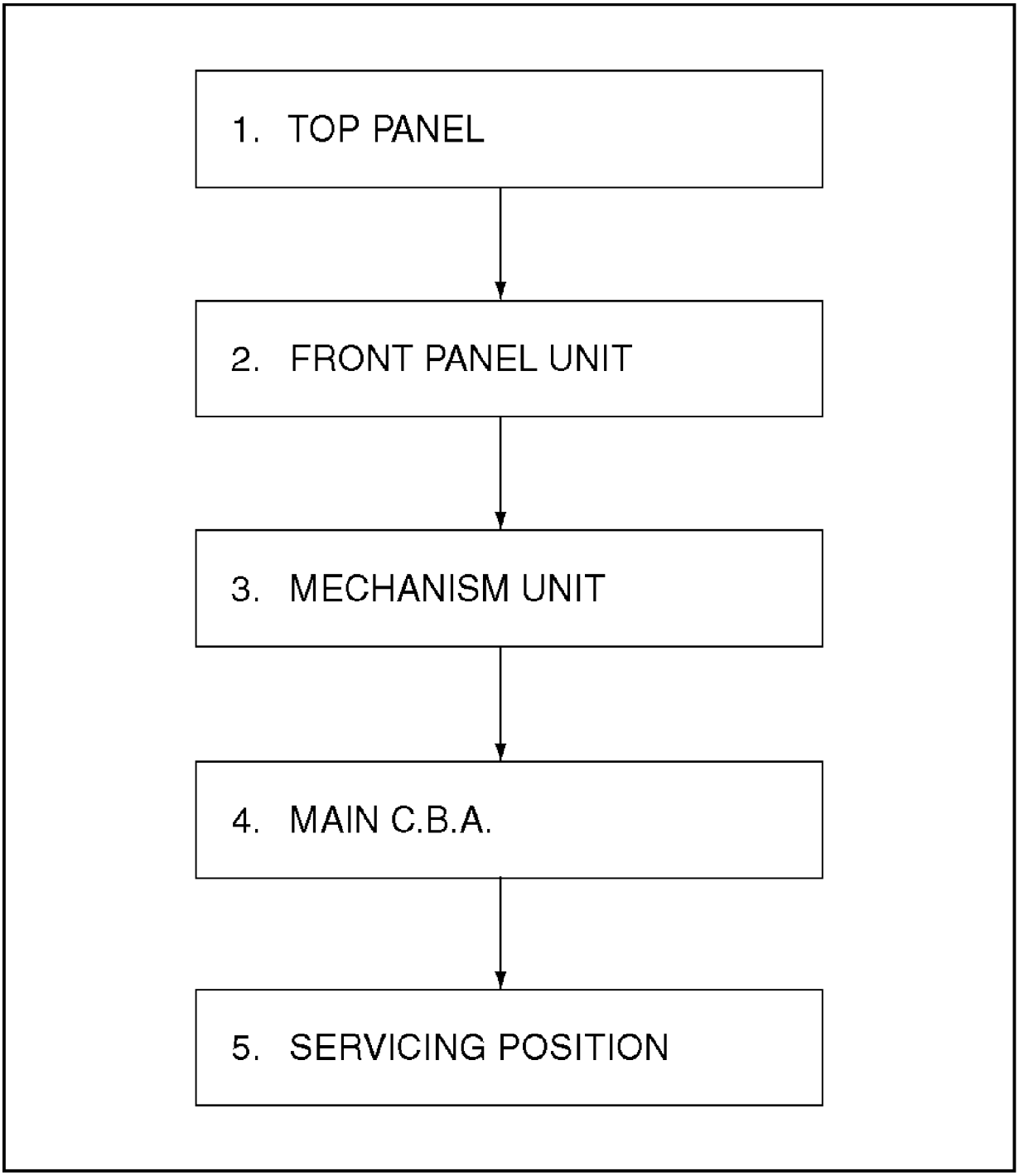
3. ADJUSTMENT PROCEDURES

3.1. DISASSEMBLY METHOD

3.1.1. DISASSEMBLY FLOW CHART

This flow chart indicates disassembly steps of the cabinet parts and the circuit boards in order to find the necessary items for servicing.
When reassembling, perform the steps in the reverse order.

Fig. D1

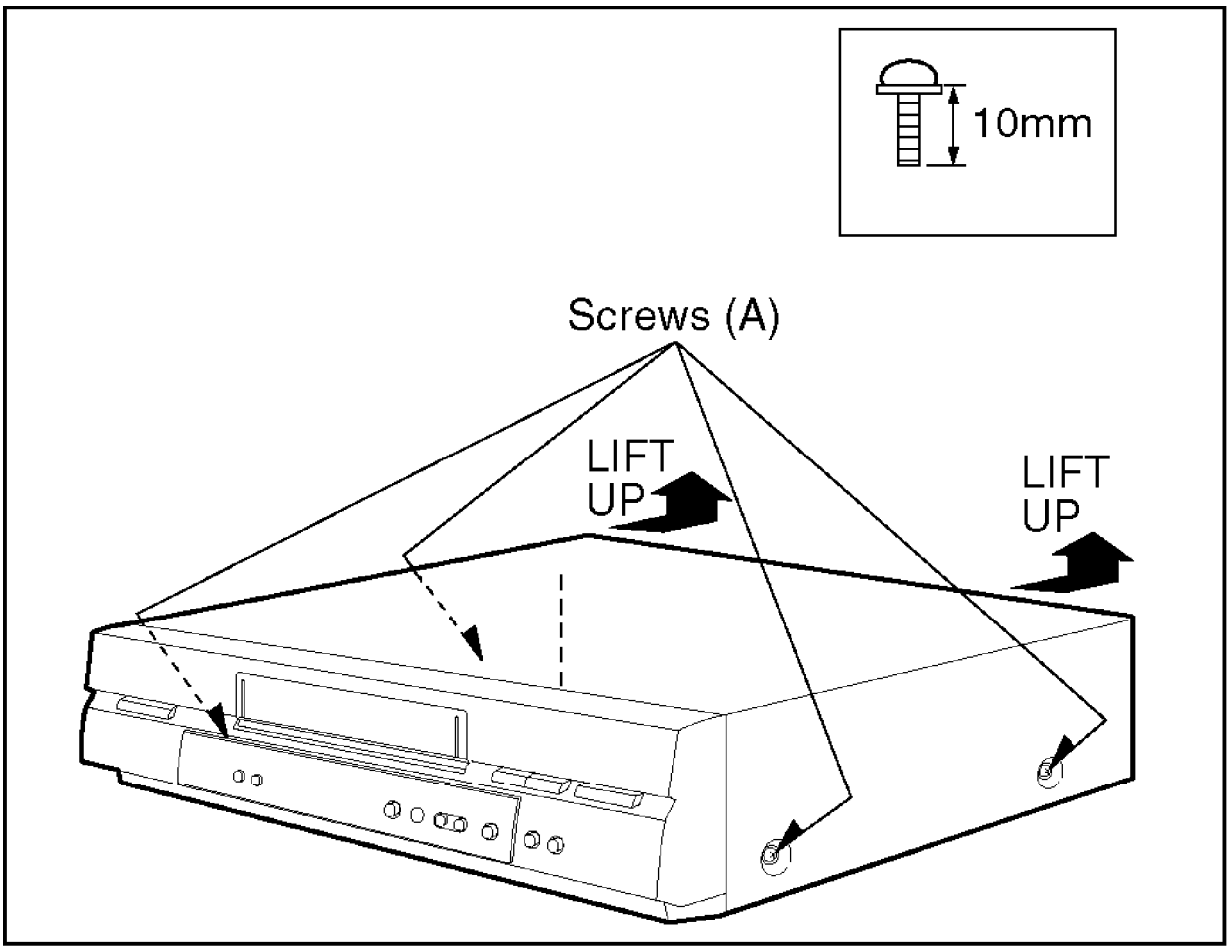


3.1.2. DETAIL OF DISASSEMBLY METHOD

1. REMOVAL OF THE TOP PANEL

Remove	**4 Screws (A)**

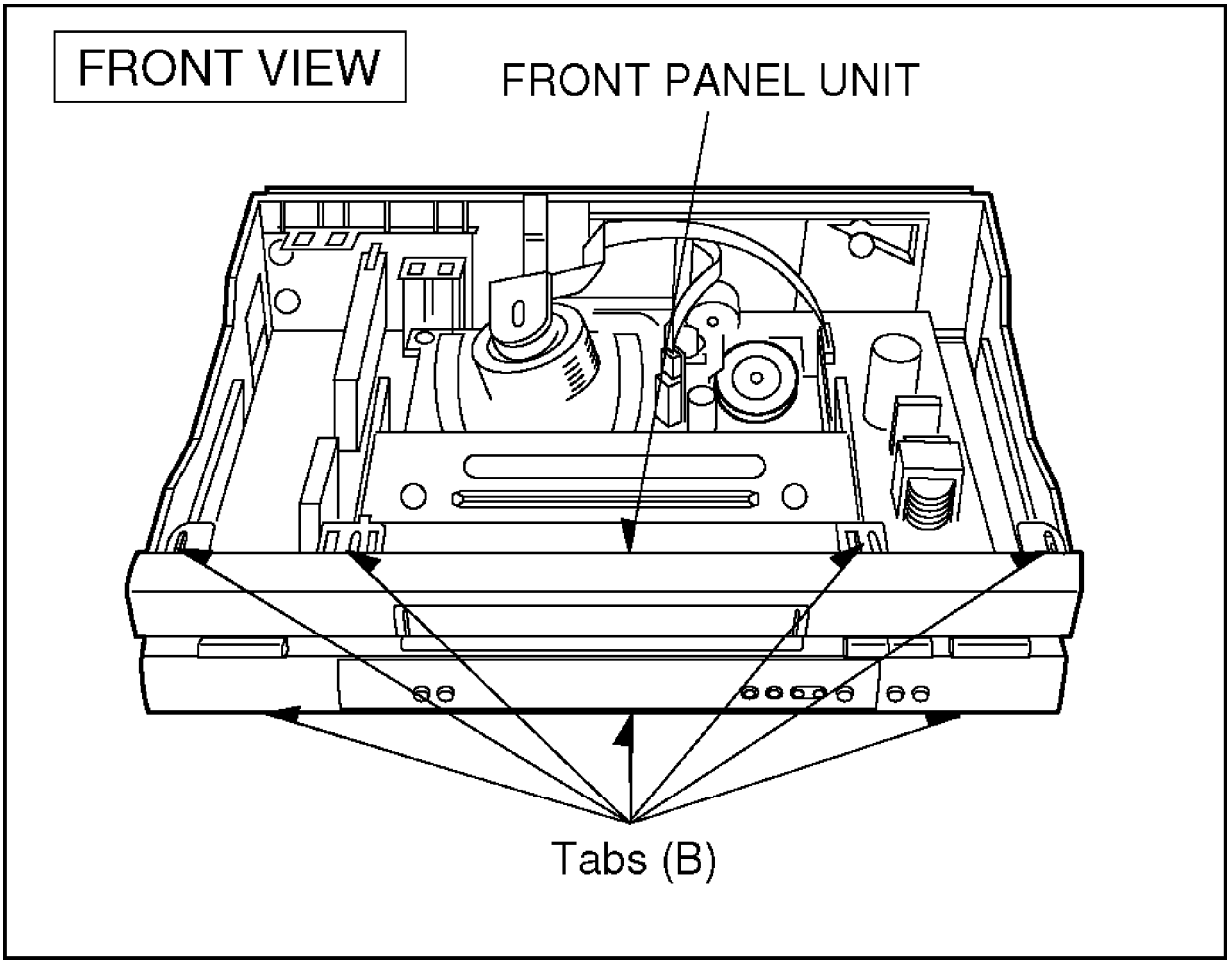
Fig.D2



2. REMOVAL OF THE FRONT PANEL UNIT

Unlock	**7 Tabs (B)**

Fig. D3



3. REMOVAL OF THE MECHANISM UNIT

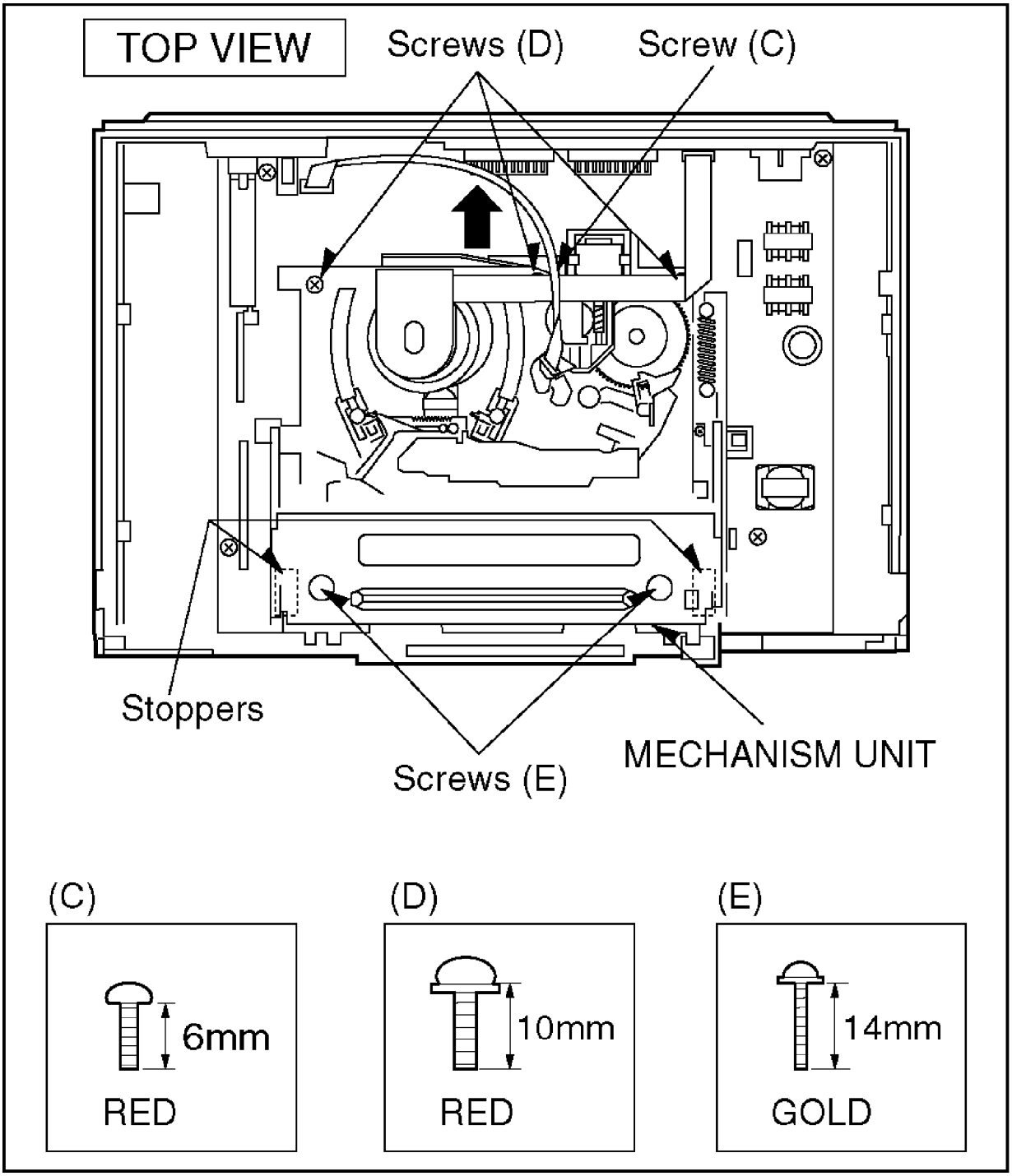
Remove	**Screw (C)**
Remove	**3 Screws (D)**
Remove	**2 screw (E)**

Note:

1. Keep pressing 2 stoppers on Cassette Holder Plate and Press Cassette Holder Plate to the rear.

2. Remove the Mechanism Unit after bend the Cylinder Shield in the direction of the arrow.

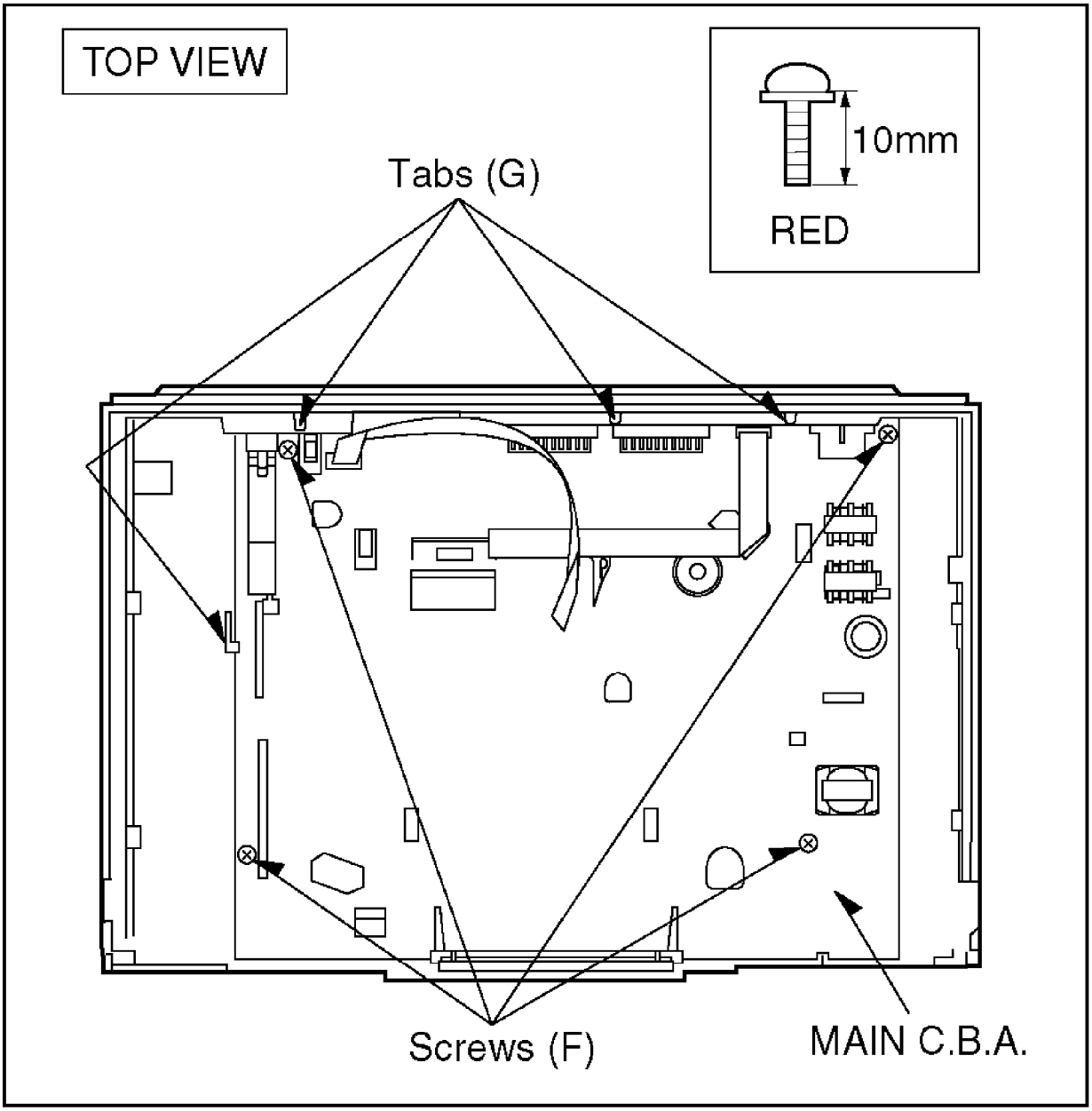
Fig. D4



4. REMOVAL OF THE MAIN C.B.A.

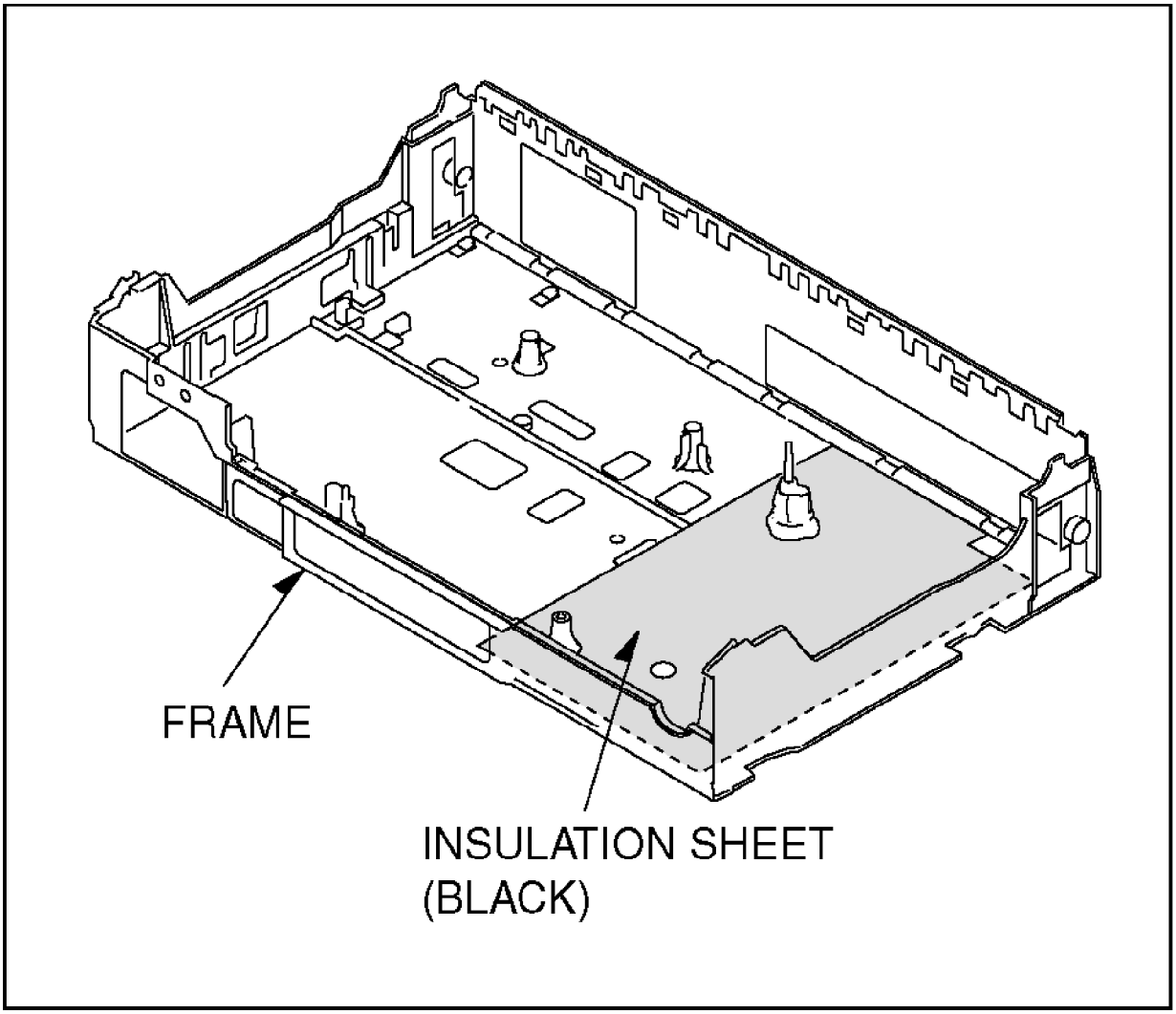
Remove	**4 screws (F)**
Unlock	**4 Tabs (G)**

Fig. D5



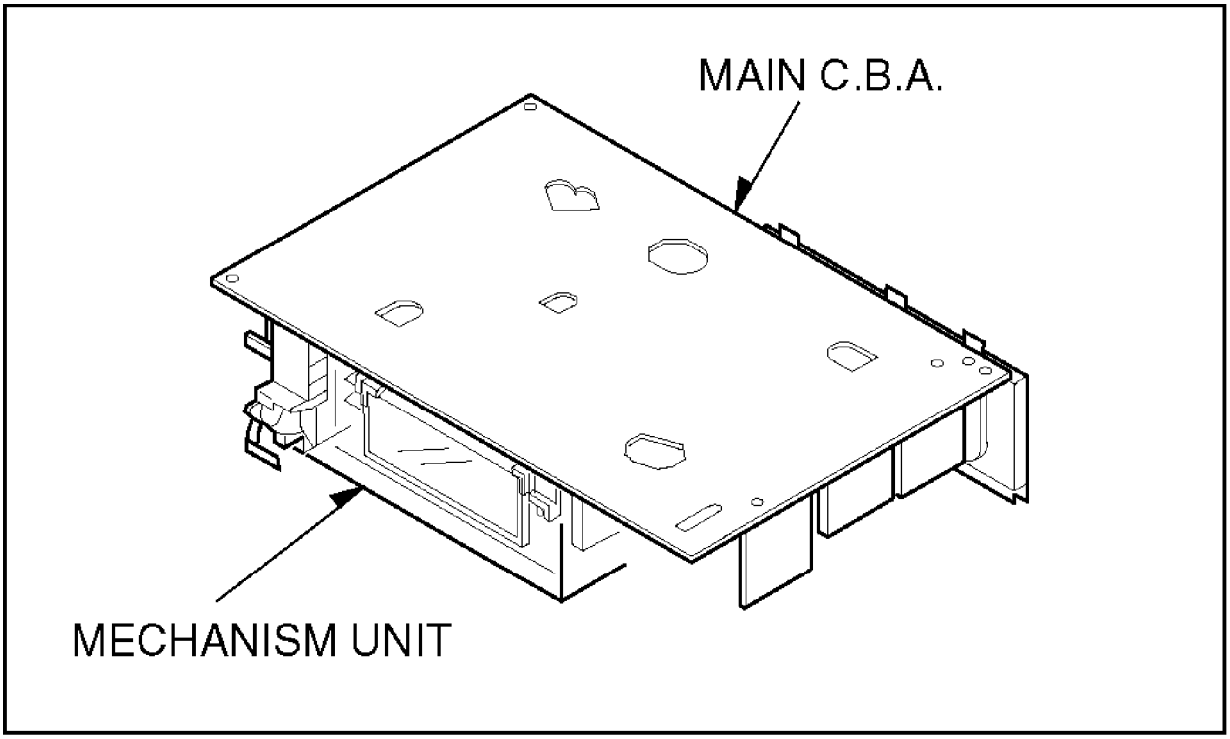
NOTE:
Before mounting the MAIN C.B.A. onto the frame, be sure to confirm that the insulation sheet is mounted on the frame as shown in Fig. D6.

Fig. D6



5. SERVICING POSITION

Fig. D7



3.2. MECHANICAL ADJUSTMENT PROCEDURES

Refer to the Service Manual for Z-Mechanism Chassis.
(Order No. VRD9802005C2)

3.3. ELECTRICAL ADJUSTMENT PROCEDURES

3.3.1. TEST EQUIPMENT

The following equipments are required for Electrical Adjustments.

1. Dual-Trace Oscilloscope

- **Voltage Range: 0.005-5V/div**
- **Frequency Range: DC-35MHz**
- **Probes: 10:1 / 1:1**

2. Frequency Counter

- **Frequency Range: 0-10MHz**
- **Probes: 1:1**

3. Universal Counter

4. Digital Volt Meter (D.V.M.)

5. Video Sweep Generator

6. Sinewave Generator

7. Video Pattern Generator

8. Monitor TV

9. DC Power Supply

10. VHS Blank Tape

11. VHS Alignment Tape

- Parts No.: VFJ8125H3F(PAL)

3.3.2. VCR SETTING

When no indication in the procedure, set each selector as follows.

1. TAPE SPEED: SP

2. CHANNEL: AV1/AV2
(Set to signal input terminal number)

3.3.3. ADJUSTMENTS

ITEM	TP	ADJ.	MODE	INPUT	TAPE	M. EQ.	SPEC.	REMARKS
PG SHIFTER ADJUSTMENT	---	---	PLAYBACK	---	ALIGNMENT TAPE (PAL)	---	---	Refer to procedure of PG SHIFTER ADJUSTMENT as shown in Fig.E3.
AI FUNCTION ADJUSTMENT	---	---	PLAYBACK (SELF-REC)	PAL COLOUR BAR	BLANK TAPE	---	---	Refer to the procedure of AI FUNCTION ADJUSTMENT as shown in Fig.E4.
VIDEO FREQUENCY RESPONSE ADJUSTMENT	VIDEO OUT	---	SP/LP/EP PLAYBACK (SELF-REC)	VIDEO SWEEP (See Fig.E1)	BLANK TAPE	OSCILLO SCOPE/ VIDEO SWEEP GENERAT OR	SP: 0+-1 (dB) (90~110%) LP: 0+-1 (dB) (90~110%) EP: 0+-3 (dB) (70~140%) (See Fig. E2)	Refer to the procedure of VIDEO FREQUENCY RESPONSE ADJUSTMENT as shown in Fig. E5.

Fig.E1

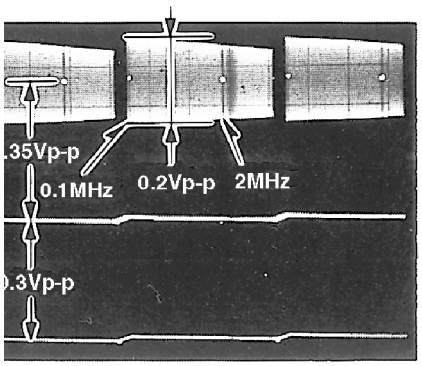
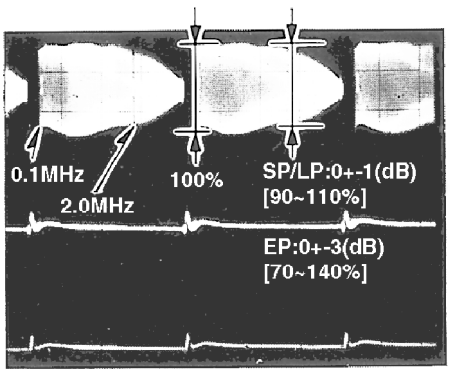


Fig.E2



)NDITION: BURST SIGNAL OFF /
ohm TERMINATED

3.3.4. PG SHIFTER ADJUSTMENT (AUTOMATIC)

PROCEDURES	FIP DISPLAY
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key once.	
Insert the Alignment cassette tape. (PAL:VFJ8125H3F)	
When the sequence of the automatical adjustment has been terminated, the following action has been made. *SUCCEED: The cassette tape is ejected. *ERROR : The "F2"is displayed on the FIP. (Check the Servo/Syscon circuit and Cylinder unit.)	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E3

3.3.5. AI FUNCTION ADJUSTMENT (AUTOMATIC)

PROCEDURES	FIP DISPLAY
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP key in 3 times.	
Insert the blank cassette tape. (The adjustment is automatically started.)	
When the sequence of the automatical adjustment has been terminated successfully, the VCR goes to STOP mode.	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

Fig. E4

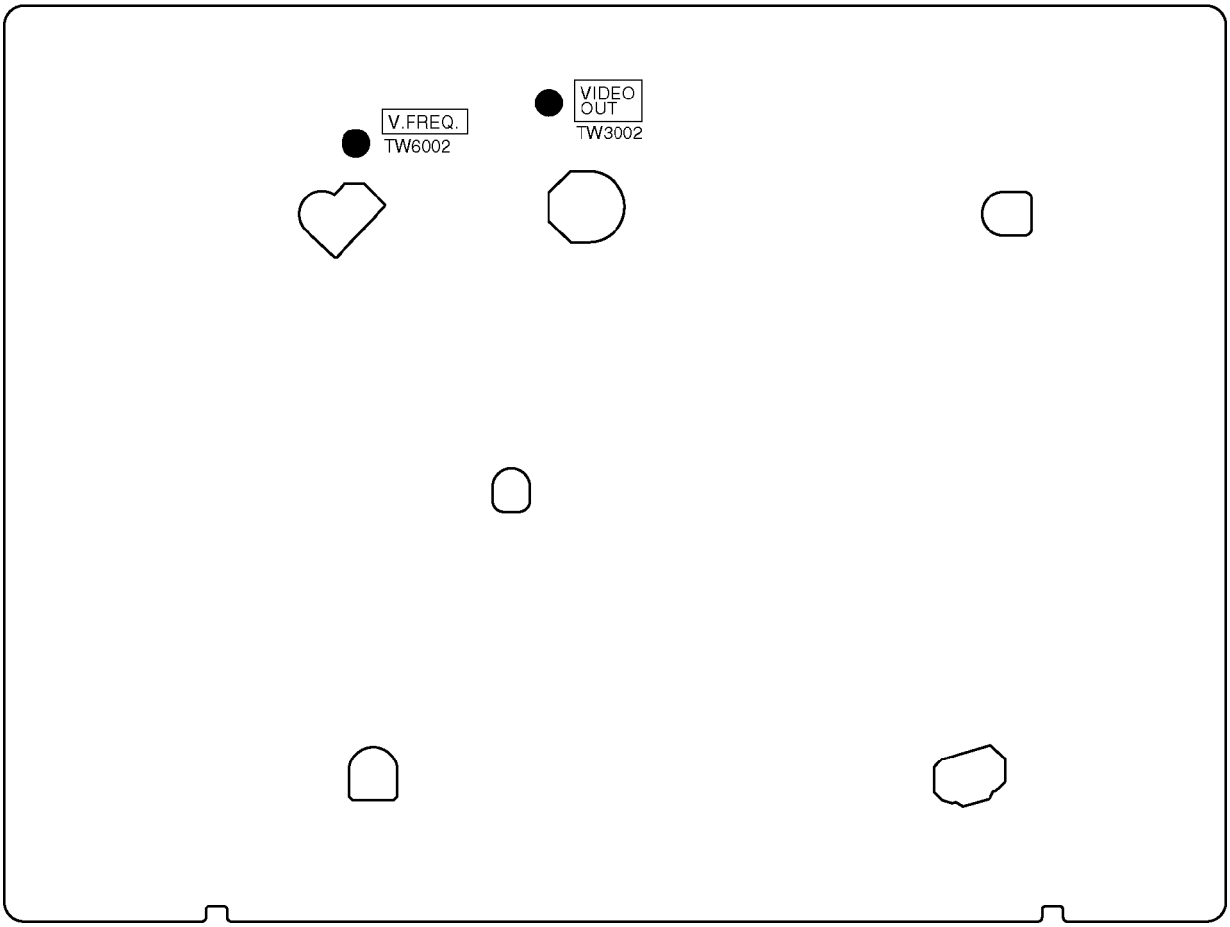
3.3.6. VIDEO FREQUENCY RESPONSE ADJUSTMENT

PROCEDURES	FIP DISPLAY
Input the Video sweep signal. (See Fig.E1)	
Press the FF and EJECT Keys simultaneously for 3 seconds.	
Press the FF and EJECT Keys simultaneously twice.	
Press the EJECT key for 3 seconds.	
Press the CH UP and/or CH DOWN key until "11" is displayed on FIP.	
Insert the Self-recorded tape and playback it. (SP/LP/EP mode)	
Connect the Oscilloscope to: *CH1....Video Out (TW3002). *CH2....V.FREQ.(TW6002)	
Press the "4" key on the remote controller. (Confirm that TW6002 becomes high(5V)).	
Adjust the Frequency response by pressing the "2"(increase) and/or "8"(decrease) key on the Remote Controller. (See Fig.E2)	
Store the Adjusted value by pressing the "5" key on the Remote Controller.	
Release the Service mode by pressing the EJECT and FF keys simultaneously in 6 times until the FIP becomes normal indication.	

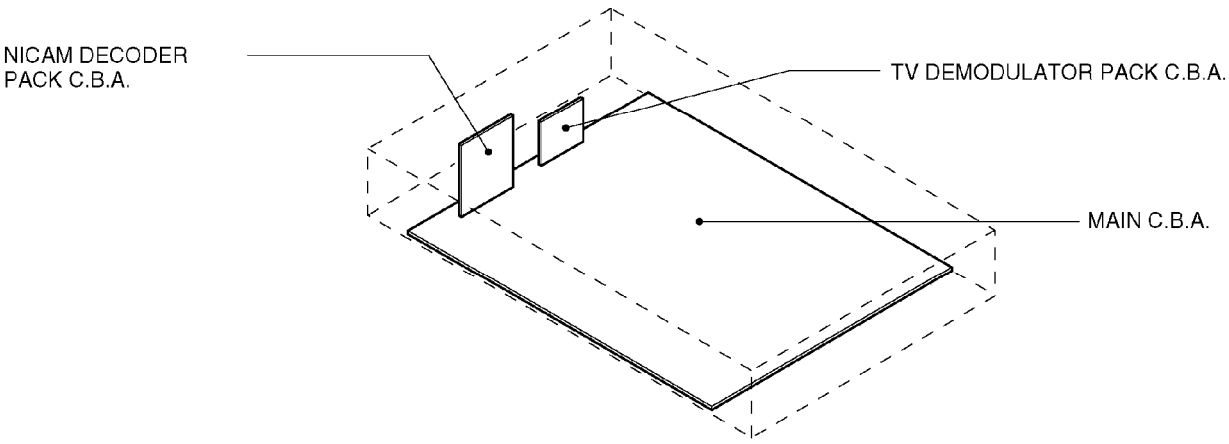
Fig. E5

3.3.7. LOCATION OF TEST POINTS& CONTROLS

MAIN C.B.A.



3.3.8. CIRCUIT BOARD LAYOUT



4. ABBREVIATIONS

5. INPUT/OUTPUT CHART

5.1. INPUT/OUTPUT CHART FOR IC6001

Fig. MP1

Fig. MP2

Fig. MP3

Fig. MP4

5.2. TRUTH TABLE

6. WAVEFORM TABLE& VOLTAGE CHART

6.1. WAVEFORM TABLE

6.2. VOLTAGE CHART

7. BLOCK DIAGRAMS

7.1. SYSTEM CONTROL& SERVO BLOCK DIAGRAM

7.2. LUMINANCE& CHROMINANCE BLOCK DIAGRAM

7.3. AUDIO BLOCK DIAGRAM

8. SCHEMATIC DIAGRAMS

8.1. POWER TRANSFORMER SECTION IN MAIN SCHEMATIC DIAGRAM

8.2. POWER SUPPLY/ RF SECTION IN MAIN SCHEMATIC DIAGRAM

8.3. TIMER SECTION IN MAIN SCHEMATIC DIAGRAM

8.4. SYSTEM CONTROL& SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

8.5. LUMINANCE& CHROMINANCE/ AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

8.6. Hi-Fi AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM

8.7. INPUT/ OUTPUT SECTION IN MAIN SCHEMATIC DIAGRAM

8.8. TV DEMODULATOR PACK SCHEMATIC DIAGRAM

8.9. NICAM DECODER PACK SCHEMATIC DIAGRAM

8.10. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM

8.11. CAPSTAN UNIT SCHEMATIC DIAGRAM

9. CIRCUIT BOARD ASSEMBLIES

9.1. TV DEMODULATOR PACK C.B.A.

9.2. NICAM DECORDER PACK C.B.A.

9.3. MAIN C.B.A.

9.4. CYLINDER STATOR UNIT

10. EXPLODED VIEWS

10.1. CHASSIS PARTS SECTION

10.2. CASING PARTS SECTION

10.3. PACKING PARTS SECTION

11. REPLACEMENT PARTS LIST

11.1. CHASSIS PARTS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
1	VEG1598	CYLINDER UNIT	[MAVD]
2	VXP2170	UPPER CYLINDER UNIT	[MAVD]
3	VDB1256	CYLINDER RETAINER	
4	VEM0715	CYLINDER MOTOR UNIT	⚠
6	VXS0135	EARTH BRUSH UNIT	
7	VMD3795	FLAT CABLE HOLDER	
10	VEK9069	CAPSTAN UNIT	
11	L1AZ00000004	FE HEAD	
12	VDB1431	TENSION ARM BOSS	
13	VDB1460	SUPPLY BRAKE ARM BOSS	
14	VDG1220KIT	MAIN CAM GEAR	
15	VDG1221	CONVERSION GEAR	
16	VDR0350	REEL TABLE	
17	VDR0350	REEL TABLE	
18	VDV0382	CAPSTAN BELT	
19	VED0412	A/C HEAD UNIT	
20	VMX2656	P4 CAP	
21	VDG1217	WORM GEAR	
22	VDG1218	WORM WHEEL GEAR	
23	VDG1219	CENTRE GEAR	
24	VEM0604	LOADING MOTOR UNIT	

Ref. No.	Part No.	Part Name & Description	Remarks
25	VMD2619	MOTOR BRACKET	
26	VMB3045	CONVERSION GEAR SPRING	
27	VMD2620	OPENER PIECE	
28	VMD2738	LED PRISM	
29	VML3165	DRIVE RACK ARM	
30	VML3166	MAIN LEVER	
31	VML3167	DRIVE MAIN LEVER ARM	
32	VML3172	SUPPLY SPRING ARM	
33	VML3176	CONVERSION LEVER A	
34	VML3177	CONVERSION LEVER B	
35	VXA6040	INCLINED BASE (S) UNIT	
36	VXA5854	INCLINED BASE (T) UNIT	
37	VXP1891	ROLLER POST	
38	VXP1891	ROLLER POST	
39	VMA9672	SUPPORT ANGLE	
41	VXL2667	TAKE UP BRAKE ARM UNIT	
43	VXL2670	TAKE UP LOADING ARM UNIT	
44	VXL2793	TENSION ARM UNIT	
45	VXL2672	SUPPLY LOADING ARM UNIT	
46	VXL2785	PINCH ARM UNIT	
47	VXL2996	P5 ARM UNIT	
48	VXL2792	IDLER ARM UNIT	
49	VXL2733	SUPPLY BRAKE ARM UNIT	
50	VXL2747	LOADING RACK UNIT	
51	VXP2035	CENTRE CLUTCH UNIT	
54	VDP1668-K	CLEANER ROLLER	
55	VML3164	CLEANER ARM	
60	VMA9516	TOP PLATE	
61	VMB3047	CONNECTION SPRING	
62	VMD3379	SIDE PLATE (L)	
63	VXA6540	SIDE PLATE (R) UNIT	
64	VXA5746	CASSETTE HOLDER UNIT	
65	VXP1730	MAIN SHAFT UNIT	
B1	VHD1118	SCREW	
B2	VHD1118	SCREW	
B3	VHD0842	SCREW	
B4	VHD0843	SCREW	
B5	VHD0843	SCREW	
B6	VHD0844	SCREW	
B7	VHD0844	SCREW	
B8	VHD1066	SCREW	
B10	VHD1044	SCREW	
B11	VHD1060	SCREW	
B12	VHD1071	SCREW	
B13	XTS26+6F	SCREW	
B14	XTN26+6F	SCREW	
B15	XTN26+7J	SCREW	
B16	XTN26+7J	SCREW	
B17	XTN26+7J	SCREW	
B18	VHD1095	SCREW	
B9	VHD1066	SCREW	
B19	VHD1185	SCREW	

Ref. No.	Part No.	Part Name & Description	Remarks
N1	VHN0311	PUSH NUT	
W1	VMX2208	WASHER	
W2	VMX3022	WASHER	
W3	VMX3022	WASHER	

11.2. CASING PARTS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
101	VGM1835	TOP PANEL	[MAVD] NV-FJ632EE-K
101	VGM1834	TOP PANEL	[MAVD] NV-FJ632EE-S
102	VYP8375	FRONT PANEL UNIT	[MAVD] NV-FJ632EE-K
102	VYP8374	FRONT PANEL UNIT	[MAVD] NV-FJ632EE-S
103	RKA0072-K	FOOT	
104	RKA0072-K	FOOT	
107	VGB0554	SUPER DRIVE BADGE	
108	VKF3486	BLINDER PANEL	[MAVD] NV-FJ632EE-K
108	VKF3485	BLINDER PANEL	[MAVD] NV-FJ632EE-S
109	VMB2521	BLINDER SPRING	
115	VKU0575	BOTTOM PLATE	[MAVD]
116	VMZ3099	VO SHEET	[MAVD]
117	VJH1175	AV JACK PLATE	[MAVD]
118	VJH1173	ANT JACK PLATE	[MAVD]
120	VWJ1461	FLAT CARD CABLE (6P)	[MAVD] P4003-A/C HEAD
121	VWJ1282	FLAT CARD CABLE (9P)	[MAVD] P2502-P2901
B101	XTW3+10TFC	SCREW	NV-FJ632EE-S
B101	XTW3+10TFZ	SCREW	NV-FJ632EE-K
B102	XTW3+10TFC	SCREW	NV-FJ632EE-S
B102	XTW3+10TFZ	SCREW	NV-FJ632EE-K
B103	XTW3+10TFC	SCREW	NV-FJ632EE-S
B103	XTW3+10TFZ	SCREW	NV-FJ632EE-K
B104	XTW3+10TFC	SCREW	NV-FJ632EE-S
B104	XTW3+10TFZ	SCREW	NV-FJ632EE-K
B105	VHD0168	SCREW	
B106	VHD0168	SCREW	
B107	VHD1092	SCREW	
B108	VHD1092	SCREW	
B109	VHD1092	SCREW	
B110	VHD1092	SCREW	
B111	VHD1092	SCREW	
B112	VHD1092	SCREW	
B113	VHD1092	SCREW	
B114	XTV26+6JFR	SCREW	

Ref. No.	Part No.	Part Name & Description	Remarks
B115	XTV26+8FR	SCREW	
B116	XTV26+8FR	SCREW	
B117	XTV26+8FR	SCREW	

11.3. PACKING PARTS SECTION PARTS LIST

Note: 1. *Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE
Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
201	VQT9549	OPERATING INSTRUCTIONS (ENGLISH/ POLISH/CHECHOSLOVAK/HANGARIAN/ RUSSIAN)	⚠ [MAVD]
202	N2QAKB000022	REMOTE CONTROLLER	[MAVD]
203	R0186-720010	BATTERY COVER	[MAVD]
205	VJA0728-A	DIN RF CABLE	[MAVD]
206	RJA0043	AC CORD	⚠ [MAVD]
210	VPK2246	ACCESSORIES PACKING	[MAVD]
211	VPN5491	CUSHION (L)	[MAVD]
212	VPN5492	CUSHION (R)	[MAVD]
215	VPG0M15	PACKING	[MAVD] NV-FJ632EE-K
215	VPG0M14	PACKING	[MAVD] NV-FJ632EE-S
		SERVICE FIXTURES & TOOLS	
	VFJ8125H3F	VHS ALIGNMENT TAPE (PAL)	
	VFK0335	RETAINING RING REMOVER (3mm/ 4mm)	
	VFK0329	POST ADJUSTMENT SCREWDRIVER	
	VFK0326	HEX WRENCH SET	
	VFK0132	BACK TENSION METER	
	VFK27	HEAD CLEANING STICK	
	VFK1024	MOLYTONE GREASE	
	VFK0330	FINE ADJUSTMENT GEAR DRIVER	
	VFK1301	SILICONE GREASE	
	VFK1298	FLOIL GREASE	

11.4. ELECTRICAL PARTS LIST

Note: 1. Be sure to make your orders of replacement parts according to this list.
2. IMPORTANT SAFETY NOTICE: Components identified with the mark ⚠ have the special characteristics for safety. When replacing any of these components, use only the same type.
3. Unless otherwise specified,
All resistors are in OHMS, K=1,000 OHMS. All capacitors are in MICROFARADS (uf), P=uuF.
4. The P.C. Board units marked width "■" show below the main assembled parts.
5. The marking (RTL) indicaters the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.
6. " [MAVD] " in the Remarks column shows that the parts is/are supplied from MAVD.

Ref. No.	Part No.	Part Name & Description	Remarks
■	VEP06E55L	MAIN C.B.A.	(RTL)[MAVD] THE FOLLOWING C.B.A.S ARE INCLUDED IN MAIN C.B.A.
			VEP07A18T,VEP07A23U
■	VEP07A18T	NICAM DECODER PACK C.B.A.	(RTL)[MAVD] INCLUDED IN MAIN C.B.A.(VEP06E55L).
■	VEP07A23U	TV DEMODULATOR PACK C.B.A.	(RTL)[MAVD] INCLUDED IN MAIN C.B.A.(VEP06E55L).
■	----------	CYLINDER STATOR C.B.A.	INCLUDED IN CYLINDER MOTOR UNIT (VEM0715).
■	----------	CAPSTAN DRIVE C.B.A.	INCLUDED IN CAPSTAN UNIT (VEK9069).
■	VEP06E55L	MAIN C.B.A.	(RTL)[MAVD]
C0701	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C0702	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C0703	ECJ2YB1A105K	C.CAPACITOR CH 10V 1U	
C0704	ECUV1E333KBN	C.CAPACITOR CH 25V 0.033U	
C0707	ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	
C0708	ECEA1HKAR47B	E.CAPACITOR 50V 0.47U	
C0710	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C0711	ECEA1CKS220	E.CAPACITOR 16V 22U	
C0712	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C0713	ECEA0JKS331	E.CAPACITOR 6.3V 330U	
C0714	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C0715	ECJ1VC1H030C	C.CAPACITOR CH 50V 3P	
C0717	ECUM1H330GUV	C.CAPACITOR CH 50V 33P	
C0719	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	F1H1E104A026
C0721	ECJ1VC1H560J	C.CAPACITOR CH 50V 56P	
C0724	ECJ1VB1H221K	C.CAPACITOR CH 50V 220P	
C1001	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1002	ECEA1AKS470	E.CAPACITOR 10V 47U	
C1003	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1006	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1008	ECA1EHJ470	E.CAPACITOR 25V 47U	[MAVD]
C1010	ECA1EHJ470	E.CAPACITOR 25V 47U	[MAVD]
C1011	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C1012	ECEA1AKS220	E.CAPACITOR 10V 22U	

Ref. No.	Part No.	Part Name & Description	Remarks
C1025	ECUV1H104KBN	C.CAPACITOR CH 50V 0.1U	[MAVD] ECJ2YB1H104K
C1026	ECUV1H104KBN	C.CAPACITOR CH 50V 0.1U	[MAVD] ECJ2YB1H104K
C1101	VCF2AAF683M	X2 CAPACITORS	⚠ [MAVD]
C1102	F1BAF1020020	CERAMIC CAPACITOR	⚠ [MAVD]
C1106	EEUEB2G330E	E.CAPACITOR 400V 33U	[MAVD]
C1107	F1A3A271A028	E.CAPACITOR 1KV 270U	F1A3A271A034
C1108	ECQB1H223JF3	P.CAPACITOR 50V 0.022U	
C1109	ECQB1H473JF3	P.CAPACITOR 50V 0.047U	
C1110	ECQV1H104JL3	P.CAPACITOR 50V 0.1U	
C1111	ECQB1H103JZ	P.CAPACITOR 50V 0.01U	
C1112	F1BAF1020020	CERAMIC CAPACITOR	⚠ [MAVD]
C1201	F1B3A332A004	E.CAPACITOR 1KV 3300U	[MAVD]
C1202	F2A1H560A101	E.CAPACITOR 50V 56U	[MAVD]
C1203	EEUFG1E821	E.CAPACITOR 25V 820P	[MAVD]
C1204	EEUFG1A182	E.CAPACITOR 10V 1800P	[MAVD]
C1205	F2A1H560A101	E.CAPACITOR 50V 56U	[MAVD]
C1206	F2A1A101A089	E.CAPACITOR 10V 100U	[MAVD]
C1207	ECQV1H104JL3	P.CAPACITOR 50V 0.1U	
C1208	ECA1AHJ331	E.CAPACITOR 10V 330U	[MAVD]
C1209	ECA1EM101	E.CAPACITOR 25V 100U	
C1502	ECUX1H331JCV	C.CAPACITOR CH 50V 330P	F1H1H3310005
C2502	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C2505	ECJ1VB1C563K	C.CAPACITOR CH 16V 0.056U	
C2506	ECJ1VB1C563K	C.CAPACITOR CH 16V 0.056U	
C2507	ECJ1VB1C563K	C.CAPACITOR CH 16V 0.056U	
C2508	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C2509	ECJ1VF1C474Z	C.CAPACITOR CH 16V 0.47U	
C2510	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C2511	ECEA0JKN220B	E.CAPACITOR 6.3V 22U	
C2512	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C2513	ECJ1VB1H392K	C.CAPACITOR CH 50V 3900P	
C2515	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	
C2516	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	
C2517	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C2518	ECJ1VF1H473Z	C.CAPACITOR CH 50V 0.047U	
C2519	ECEA1EKA470B	E.CAPACITOR 25V 47U	
C2520	ECJ2VB1E683K	C.CAPACITOR CH 25V 0.068U	[MAVD]
C2521	ECUV1C154KBN	C.CAPACITOR CH 16V 0.15U	
C2522	ECUV1C154KBN	C.CAPACITOR CH 16V 0.15U	
C2523	ECUV1C154KBN	C.CAPACITOR CH 16V 0.15U	
C2524	ECEA1VKN4R7	E.CAPACITOR 35V 4.7U	
C3002	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C3003	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C3004	ECEA1HKS010	E.CAPACITOR 50V 1U	
C3008	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	
C3009	ECUX1H070DCV	C.CAPACITOR CH 50V 7P	
C3012	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3013	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3015	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3016	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3017	ECEA1AKS221	E.CAPACITOR 10V 220U	
C3018	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3019	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	

Ref. No.	Part No.	Part Name & Description	Remarks
C3020	ECEA1HKS010	E.CAPACITOR 50V 1U	
C3021	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3022	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3023	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3024	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3025	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C3027	ECEA1HKSR33	E.CAPACITOR 50V 0.33U	
C3028	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3029	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3030	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3031	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C3032	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C3033	ECEA1HKAR47B	E.CAPACITOR 50V 0.47U	
C3035	ECEA1EKN4R7B	E.CAPACITOR 25V 4.7U	
C3036	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3037	ECEA1AKS221	E.CAPACITOR 10V 220U	
C3038	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C3039	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3040	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3041	ECEA1AKS220	E.CAPACITOR 10V 22U	
C3042	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C3043	ECEA1CKS100	E.CAPACITOR 16V 10U	
C3045	ECJ1VC1H560J	C.CAPACITOR CH 50V 56P	
C3046	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C3047	ECYX1H821JCV	C.CAPACITOR CH 50V 820P	
C3048	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C3050	ECEA1AKS220	E.CAPACITOR 10V 22U	
C3051	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	
C3052	ECUX1H820JCV	C.CAPACITOR CH 50V 82P	
C3053	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	
C3054	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	
C3501	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C3502	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3503	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3505	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C3506	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3507	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3508	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3509	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3510	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C3511	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4001	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	
C4002	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4004	ECEA1AKS220	E.CAPACITOR 10V 22U	
C4005	ECEA1HKS010	E.CAPACITOR 50V 1U	
C4006	ECJ1VB1H272K	C.CAPACITOR CH 50V 2700P	
C4007	ECUV1H122JCN	C.CAPACITOR CH 50V 1200P	ECJ2VC1H122J
C4008	ECEA1EKS4R7	E.CAPACITOR 25V 4.7U	
C4009	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C4010	ECUX1E273KBV	C.CAPACITOR CH 25V 0.027U	
C4011	ECJ1VB1H682K	C.CAPACITOR CH 50V 6800P	
C4012	ECJ1VB1H822K	C.CAPACITOR CH 50V 8200P	
C4013	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C4014	ECEA1HKS010	E.CAPACITOR 50V 1U	

Ref. No.	Part No.	Part Name & Description	Remarks
C4015	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C4016	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4017	ECEA1AKS220	E.CAPACITOR 10V 22U	
C4018	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4019	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4020	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C4026	ECEA1AKS220	E.CAPACITOR 10V 22U	
C4028	ECJ1VB1E223K	C.CAPACITOR CH 25V 0.022U	
C4029	ECJ1VB1H152K	C.CAPACITOR CH 50V 1500P	
C4030	ECEA1AKS221	E.CAPACITOR 10V 220U	
C4031	ECQB1H223JF3	P.CAPACITOR 50V 0.022U	
C4032	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C4034	ECJ1VB1H822K	C.CAPACITOR CH 50V 8200P	
C4501	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4502	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4503	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4504	ECQB1H473JF4	P.CAPACITOR 50V 0.047U	
C4505	ECEA1AKS330B	E.CAPACITOR 10V 33U	
C4506	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4507	ECEA1CKS220	E.CAPACITOR 16V 22U	
C4508	ECQB1H153JF	P.CAPACITOR 50V 0.015U	
C4509	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	
C4510	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C4511	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C4512	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C4513	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C4514	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C4515	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C4516	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4518	ECJ2VB1C224K	C.CAPACITOR CH 16V 0.22U	
C4519	ECQB1H153JF3	P.CAPACITOR 50V 0.015U	
C4520	ECEA1CKS220	E.CAPACITOR 16V 22U	
C4521	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4522	ECQB1H473JF3	P.CAPACITOR 50V 0.047U	
C4523	ECEA1AKS330	E.CAPACITOR 10V 33U	
C4528	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4529	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4530	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4531	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4532	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4533	ECEA1CKS100	E.CAPACITOR 16V 10U	
C4534	ECEA1AKS220	E.CAPACITOR 10V 22U	
C4536	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4537	ECJ1VB1H103K	C.CAPACITOR CH 50V 0.01U	
C4538	ECEA1CKA470	E.CAPACITOR 16V 47U	
C4540	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4541	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4901	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C4902	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C4903	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4904	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4905	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4906	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4907	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	[MAVD]

Ref. No.	Part No.	Part Name & Description	Remarks
C4908	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	[MAVD]
C4909	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	[MAVD]
C4910	ECJ1VC1H470J	C.CAPACITOR CH 50V 47P	[MAVD]
C4912	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4913	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4914	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4915	ECJ1XB1H471K	C.CAPACITOR CH 50V 470P	
C4916	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4919	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4920	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4921	ECEA1AKS221	E.CAPACITOR 10V 220U	
C4923	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4925	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4926	ECEA1AKS221	E.CAPACITOR 10V 220U	
C4928	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4929	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4930	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4937	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4941	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C4942	ECJ1VB1C104K	C.CAPACITOR CH 16V 0.1U	
C4946	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C6001	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C6002	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C6003	ECUX1H471JCV	C.CAPACITOR CH 50V 470P	ECJ1XC1H471J
C6004	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C6005	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C6008	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C6009	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	
C6010	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	
C6011	ECUX1H180JCV	C.CAPACITOR CH 50V 18P	
C6012	ECJ1VC1H220J	C.CAPACITOR CH 50V 22P	[MAVD]
C6013	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C6014	ECJ1VB1H102K	C.CAPACITOR CH 50V 1000P	
C6015	ECEA1CKS100	E.CAPACITOR 16V 10U	
C6016	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C6017	ECUX1H681JCV	C.CAPACITOR CH 50V 680P	
C7301	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7304	F2A0J1010027	E.CAPACITOR 6.3V 100U	
C7305	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7306	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7307	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7308	ECEA1HKS2R2	E.CAPACITOR 50V 2.2U	
C7311	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
C7312	ECJ1VC1H220J	C.CAPACITOR CH 50V 22P	[MAVD]
C7313	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7315	ECJ2VB1E104K	C.CAPACITOR CH 25V 0.1U	
C7316	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7317	F2A1C100A009	E.CAPACITOR 16V 10U	
C7318	F2A0J470A011	E.CAPACITOR 6.3V 47U	
C7319	F2A1C100A009	E.CAPACITOR 16V 10U	
C7320	F2A1C100A009	E.CAPACITOR 16V 10U	
C7324	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7325	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7341	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	

Ref. No.	Part No.	Part Name & Description	Remarks
C7342	ECJ1VB1H472K	C.CAPACITOR CH 50V 4700P	
C7343	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C7501	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7502	ECEA1HKS100	E.CAPACITOR 50V 10U	
C7503	ECJ1VC1H120J	C.CAPACITOR CH 50V 12P	
C7504	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7507	VCE0073	SUPER CAPACITOR	
C7508	ECEA1AKS221	E.CAPACITOR 10V 220U	
C7509	ECJ1VB1H682K	C.CAPACITOR CH 50V 6800P	
C7510	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7511	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7603	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7604	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7610	ECEA1HKS010	E.CAPACITOR 50V 1U	
C7613	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7614	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7615	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7616	ECEA0JKS101	E.CAPACITOR 6.3V 100U	
C7617	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7620	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7623	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7625	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C7626	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C7627	ECJ1VF1H103Z	C.CAPACITOR CH 50V 0.01U	
C7701	ECJ1VC1H151J	C.CAPACITOR CH 50V 150P	
C7702	ECJ1VF1C474Z	C.CAPACITOR CH 16V 0.47U	
C7703	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7704	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
C7705	ECJ1VB1H222K	C.CAPACITOR CH 50V 2200P	
C7706	ECUX1C333KBV	C.CAPACITOR CH 16V 0.033U	
C7707	ECJ1VF1C104Z	C.CAPACITOR CH 16V 0.1U	
C7708	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C7709	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C7710	ECJ1VC1H330J	C.CAPACITOR CH 50V 33P	[MAVD]
C7711	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	ECJ1XC1H221J
C7712	ECJ2VF1C105Z	C.CAPACITOR CH 16V 1U	
C7713	ECEA0JKS470	E.CAPACITOR 6.3V 47U	
D0702	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
D1003	MA4056N-H	DIODE	MAZ4056NH
D1004	MA4056N-H	DIODE	MAZ4056NH
D1006	MA4056N-H	DIODE	MAZ4056NH
D1008	MA4130N-L	DIODE	MAZ4130NL
D1101	ERZVA5Z471	TRANSIENT/SURGE ABSORBER	⚠
D1103	DF08S-6622	DIODE	B0KB00000013
D1104	MAZ40270LF	DIODE	[MAVD]
D1105	MA2C165001VT	DIODE	
D1106	MA185	DIODE	MA2C185
D1107	MAZ751000C	DIODE	
D1108	AU01Z	DIODE	B0HAGM000006
D1201	MA185	DIODE	MA2C185
D1204	21DQ10FC4	DIODE	B0JAML000007
D1206	11EQS04	DIODE	B0JAME000020
D1207	11EQS04	DIODE	B0JAME000020

[redacted]	[redacted]	[redacted]	[redacted]

Ref. No.	Part No.	Part Name & Description	Remarks
D1208	MA185	DIODE	MA2C185
D1209	11EQS04	DIODE	B0JAME000020
D1501	SIR505S	DIODE	B3EA00000040
D2501	MA2C165001VT	DIODE	
D2502	MA2C165001VT	DIODE	
D3001	MA2C165001VT	DIODE	
D4502	MA2C165001VT	DIODE	
D4901	MA4051N-M	DIODE	MAZ4051NM
D4902	MA4051N-M	DIODE	MAZ4051NM
D4903	MA2C165001VT	DIODE	
D4904	MA2C165001VT	DIODE	
D7501	MA4220N-M	DIODE	[MAVD]
D7503	B0JACE000001	DIODE	
D7601	MA4300M	DIODE	MAZ43000M
D7701	MA2C165001VT	DIODE	
DP7501	A2BD00000040	DISPLAY TUBE	
F1101	VSF0243C16	FUSE	⚠ K5D162BL0006
FL7301	VLF0633	FILTER	J0HACK000008
IC0701	LA75503	IC	C1AA00000606
IC1201	UPC1093J	IC	C0DAEMC00002
IC1501	RPI354N	IC	B3EZ00000001
IC1502	RPI354N	IC	B3EZ00000001
IC2501	AN3811NK	IC	
IC3001	AN3531NFBS	IC	
IC3501	AN3368SB	IC	
IC4501	AN3656NFBPBV	IC	
IC4901	LA73021M	IC	C1AB00000933
IC6001	C2CBJG000215	IC	[MAVD]
IC7301	TDA9874AH	IC	C1AB00001404
IC7302	PST7043	IC	C0EAH0000051
IC7501	M35502AFP	IC	
IC7502	PNA4618M08VT	IC	[MAVD]
IC7503	C0EBE0000211	IC	[MAVD]
IC7504	C0EBH0000218	IC	[MAVD]
IC7701	C1AB00001293	IC	[MAVD]
IC7702	M24C16-WBN6	IC	C3EAGC000015
JK4901	VJJ0377	PHONO JACK	K2HA202B0018
JK4902	K1FB121B0003	SOCKET	[MAVD]
JK4903	K1FB121B0003	SOCKET	[MAVD]
K0703	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K0707	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K0709	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
K1213	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3003	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3506	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3508	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K3509	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K4004	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017

Ref. No.	Part No.	Part Name & Description	Remarks
K4007	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K4917	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K4919	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7301	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7302	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7303	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7502	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7602	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7603	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7605	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7611	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7613	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
K7702	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
L0701	ELJNAR27JF	INDUCTOR 0.27UH	
L0703	ELJNA2R2JF	INDUCTOR 2.2UH	
L1101	ELF15N005A	LINE FILTER	⚠
L1102	ELF15N003A	LINE FILTER	⚠
L1201	VLQ0775K220	CHOKE COIL	[MAVD]
L1202	G0A220G00018	COIL	G0A220G00019
L2501	VLQ0599J680	COIL 68UH	G0C680JA0026
L3002	G0C220JA0019	INDUCTOR	
L3005	VLQ0599J470	COIL 47UH	G0C470JA0026
L3006	G0C101JA0019	INDUCTOR	
L3007	VLQ0599J680	COIL 68UH	G0C680JA0026
L3008	G0C101JA0019	INDUCTOR	
L3009	G0C330JA0019	INDUCTOR	
L3010	VLQ0599J470	COIL 47UH	G0C470JA0026
L3011	VLQ0599J390	COIL 39UH	G0C390JA0026
L3012	VLQ0599J560	COIL 56UH	G0C560JA0026
L3501	G0C330JA0019	INDUCTOR	
L4001	ELELN153JA	INDUCTOR 15000UH	
L4003	VLQ0599J680	COIL 68UH	G0C680JA0026
L4502	VLQ0599J1R2	COIL 1.2UH	G0C1R2JA0026
L4901	VLQ0599JR22	COIL 0.22UH	
L4902	VLQ0599J680	COIL 68UH	G0C680JA0026
L4903	VLQ0599J680	COIL 68UH	G0C680JA0026
L6001	G0C101JA0019	INDUCTOR	
L7302	G0C1R0JA0019	INDUCTOR	
L7601	G0C330JA0019	INDUCTOR	
L7602	VLQ0599J270	COIL 27UH	G0C270JA0026
L7603	VLQ0599J270	COIL 27UH	G0C270JA0026
L7604	VLQ0599J2R2	COIL 2.2UH	G0C2R2JA0026
L7607	G0C100JA0019	INDUCTOR	[MAVD]
L7608	VLQ0599J2R2	COIL 2.2UH	G0C2R2JA0026
L7609	G0C100JA0019	INDUCTOR	[MAVD]
L7701	VLQ0599J680	COIL 68UH	G0C680JA0026
L7702	G0C330JA0019	INDUCTOR	
L7703	VLQ0599J680	COIL 68UH	G0C680JA0026
LB0701	VLP0147	COIL	J0JBC0000041
LB1102	J0JHC0000070	FILTER	[MAVD]
LB1106	J0JHC0000070	FILTER	[MAVD]

Ref. No.	Part No.	Part Name & Description	Remarks
LB1107	J0JKB0000028	FILTER	J0JKB0000027
LB1109	J0JKB0000028	FILTER	J0JKB0000027
LB3501	VLP0147	COIL	J0JBC0000041
LB3502	VLP0147	COIL	J0JBC0000041
LB3503	VLP0147	COIL	J0JBC0000041
LB3504	VLP0147	COIL	J0JBC0000041
LB4901	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
LB4902	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
LB4903	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
LB4904	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
LB4905	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
LB4906	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
LB7301	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LB7303	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
LR1101	J1ZZA0000001	FILTER	
P1102	K2AA2K000012	AC INLET	⚠ [MAVD]
P1501	VJS3837A002	CONNECTOR (FEMALE) 2P	K1KB02A00035
P2501	VJP3835E012	CONNECTOR (MALE) 12P	[MAVD] K1KA12A00127
P2502	VJS3537A009G	CONNECTOR (FEMALE) 9P	K1MN09A00012
P3502	VJS3537A010G	CONNECTOR (FEMALE) 10P	K1MN10A00036
P4002	VJS3837A002	CONNECTOR (FEMALE) 2P	K1KB02A00035
P4003	VJS3537A006G	CONNECTOR (FEMALE) 6P	K1MN06A00034
PK0701	VJR0826E009W	CONNECTOR (MALE) 9P	K1MR09A00028
PK7301	VJR0777B007W	CONNECTOR (MALE) 7P	K1MM07B00002
PK7302	VJR0777B006W	CONNECTOR (MALE) 6P	K1MM06B00002
PP0701	VJP3589E004B	CONNECTOR (MALE) 4P	K1KA04B00135
Q0702	2SD0601ASL	TRANSISTOR	[MAVD]
Q1001	2SC1959-Y	TRANSISTOR	
Q1002	2SD602A-R	TRANSISTOR	2SD0602AR
Q1003	2SC1959-Y	TRANSISTOR	
Q1004	2SC1959-Y	TRANSISTOR	
Q1005	2SD602A-R	TRANSISTOR	2SD0602AR
Q1006	2SD0601A0L	TRANSISTOR	[MAVD]
Q1007	2SC1959-Y	TRANSISTOR	
Q1008	2SB0710A0L	TRANSISTOR	
Q1010	2SC1959-Y	TRANSISTOR	
Q1011	2SD0601A0L	TRANSISTOR	[MAVD]
Q1101	2SK2876	TRANSISTOR	[MAVD]
Q1102	B1DEDR000003	TRANSISTOR	
Q1103	2SC3311ASA	TRANSISTOR	
Q1104	2SD1992A-R	TRANSISTOR	
Q1201	PS2561L2V13W	PHOTO COUPLER	⚠
Q1501	PNB2301MBV	TRANSISTOR	
Q1502	PNB2301MAV	TRANSISTOR	
Q4001	2SD0601A0L	TRANSISTOR	[MAVD]
Q4002	2SD0601A0L	TRANSISTOR	[MAVD]
Q4005	2SB710-R	TRANSISTOR	2SB07100R
Q4006	2SD602A-R	TRANSISTOR	2SD0602AR

Ref. No.	Part No.	Part Name & Description	Remarks
Q4901	2SD0601A0L	TRANSISTOR	[MAVD]
Q4903	2SD0601A0L	TRANSISTOR	[MAVD]
Q4904	2SB709A	TRANSISTOR	2SB0709A
Q7701	2SB709A	TRANSISTOR	2SB0709A
Q7702	2SD0601A0L	TRANSISTOR	[MAVD]
Q7703	2SD0601A0L	TRANSISTOR	[MAVD]
Q7704	2SD0601A0L	TRANSISTOR	[MAVD]
Q7707	2SB709A	TRANSISTOR	2SB0709A
QR1001	UNR211200L	TRANSISTOR RESISTOR	[MAVD]
QR1002	UNR221100L	TRANSISTOR RESISTOR	
QR3502	UN2212	TRANSISTOR-RESISTOR	UNR2212
QR4001	UN2212	TRANSISTOR-RESISTOR	UNR2212
QR4002	UNR221100L	TRANSISTOR RESISTOR	
QR4003	UN2111	TRANSISTOR	UNR211100L
QR4005	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR4501	UN2216	TRANSISTOR	UNR2216
QR4502	UN2216	TRANSISTOR	UNR2216
QR4503	UN2216	TRANSISTOR	UNR2216
QR4504	UN2216	TRANSISTOR	UNR2216
QR4505	UN2113	TRANSISTOR-RESISTOR	UNR2113
QR4506	UN2216	TRANSISTOR	UNR2216
QR4903	UN2212	TRANSISTOR-RESISTOR	UNR2212
QR4904	UN2215	TRANSISTOR-RESISTOR	UNR2215
QR4905	UN2215	TRANSISTOR-RESISTOR	UNR2215
QR6001	UN2215	TRANSISTOR-RESISTOR	UNR2215
QR6006	UNR221100L	TRANSISTOR RESISTOR	
R0705	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R0707	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	
R0708	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	
R0709	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R0711	ERJ3GEYJ181V	M.RESISTOR CH 1/16W 180	
R0713	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R0714	ERJ3GEYJ562V	M.RESISTOR CH 1/16W 5.6K	D0GB562JA002
R0715	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	
R0717	ERJ3GEYJ471	M.RESISTOR CH 1/16W 470	
R0719	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R0725	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R0727	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R0731	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	D0GB101JA002
R0732	ERJ3GEYJ472	M.RESISTOR CH 1/16W 4.7K	
R0740	ERJ3GEYG271	M.RESISTOR CH 1/16W 270	
R0741	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R0742	ERJ8GEYJ151	M.RESISTOR CH 1/8W 150	
R0745	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	
R1001	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R1002	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R1003	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R1004	ERJ6GEYJ563	M.RESISTOR CH 1/10W 56K	
R1006	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1007	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1008	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R1009	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	

Ref. No.	Part No.	Part Name & Description	Remarks
R1010	ERDS2FJ103	C.RESISTOR 1/4W 10K	
R1011	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R1012	ERDS2FJ471	C.RESISTOR 1/4W 470	
R1015	ERDS2FJ102	C.RESISTOR 1/4W 1K	
R1016	ERDS2FJ102	C.RESISTOR 1/4W 1K	
R1017	ERDS2FJ471	C.RESISTOR 1/4W 470	
R1023	ERDS2FJ103	C.RESISTOR 1/4W 10K	
R1025	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R1026	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1027	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R1029	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R1030	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R1102	ERDS2TJ105T	C.RESISTOR 1/4W 1M	
R1103	ERDS2TJ105T	C.RESISTOR 1/4W 1M	
R1104	ERDS2FJ102	C.RESISTOR 1/4W 1K	
R1105	ERDS2FJ101	C.RESISTOR 1/4W 100	
R1106	ERG2SJ331	M.RESISTOR 2W 330	
R1107	ERDS2FJ101	C.RESISTOR 1/4W 100	
R1108	ERX1SJR51	M.RESISTOR 1W 0.51	
R1109	ER0S2CKF1801	M.RESISTOR 1/4W 180	
R1110	ERDS2FJ104	C.RESISTOR 1/4W 100K	
R1111	ERDS2FJ331	C.RESISTOR 1/4W 330	
R1112	ERDS2FJ3R3	C.RESISTOR 1/4W 3.3	
R1113	ERDS2FJ330	C.RESISTOR 1/4W 33	
R1201	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R1202	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	
R1203	ERJ6GEYG223V	M.RESISTOR CH 1/10W 22K	
R1204	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	
R1205	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R1206	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R1207	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R1208	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R1209	ERJ6GEYG563V	M.RESISTOR CH 1/10W 56K	
R1501	ERDS2FJ121	C.RESISTOR 1/4W 120	
R1502	ERDS2TJ181	C.RESISTOR 1/4W 180	
R1503	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R1504	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R1505	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R2501	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R2502	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R2503	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R2504	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R2505	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	
R2506	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	
R2508	ERJ6GEYG433	M.RESISTOR CH 1/10W 43K	
R2509	ERDS2FJ331	C.RESISTOR 1/4W 330	
R2510	ERDS2FJ330	C.RESISTOR 1/4W 33	
R2511	ERDS2FJ330	C.RESISTOR 1/4W 33	
R2512	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R2515	ERDS2FJ330	C.RESISTOR 1/4W 33	
R2516	ERJ6GEYJ1R5	M.RESISTOR CH 1/10W 1.5	[MAVD]
R2517	ERJ6GEYJ1R2	M.RESISTOR CH 1/10W 1.2	
R3002	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	
R3006	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	

Ref. No.	Part No.	Part Name & Description	Remarks
R3007	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R3012	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R3013	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R3015	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R3016	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R3017	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	
R3018	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R3019	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R3022	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	
R3023	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	
R3025	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R3026	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	
R3027	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	
R3028	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R3029	ERJ6GEYG152V	M.RESISTOR CH 1/10W 1.5K	
R3030	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R3031	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	
R3032	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	
R3033	ERJ6GEYG152V	M.RESISTOR CH 1/10W 1.5K	
R3034	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	
R3501	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R3503	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	
R3504	ERJ6GEYG301	M.RESISTOR CH 1/10W 300	[MAVD]
R3506	ER0S2CHF3600	M.RESISTOR 1/4W 360	
R4001	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4002	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	
R4003	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4004	ERJ6GEYG241	M.RESISTOR CH 1/10W 240	
R4005	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4006	ERJ6GEYG753	M.RESISTOR CH 1/10W 75K	
R4007	ERJ6GEYJ153V	M.RESISTOR CH 1/10W 15K	
R4008	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	
R4009	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R4010	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R4011	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R4012	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R4014	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	
R4015	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	
R4016	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	
R4017	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R4018	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	
R4019	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	
R4020	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4021	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	
R4022	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	
R4026	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4027	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	
R4028	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	
R4029	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	
R4030	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R4501	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R4502	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R4503	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R4504	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	

Ref. No.	Part No.	Part Name & Description	Remarks
R4508	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	
R4509	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R4510	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4511	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R4512	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	
R4513	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4514	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R4515	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4516	ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	
R4517	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4518	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4519	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	
R4520	ERJ6GEYJ124V	M.RESISTOR CH 1/10W 120K	
R4521	ERJ6GEYJ511	M.RESISTOR CH 1/10W 510	
R4522	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R4523	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4524	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4525	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4527	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4528	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	
R4529	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4531	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4535	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4536	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4537	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R4538	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R4902	ERDS2FJ471	C.RESISTOR 1/4W 470	
R4903	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R4904	ERJ6GEYJ153V	M.RESISTOR CH 1/10W 15K	
R4905	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4906	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R4908	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4909	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4910	ERJ6GEYJ474V	M.RESISTOR CH 1/10W 470K	
R4911	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4912	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R4913	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4914	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R4915	ERDS2FJ471	C.RESISTOR 1/4W 470	
R4916	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R4918	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	
R4926	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R4928	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R4938	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R4941	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R4942	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R4945	ERJ6GEYJ153V	M.RESISTOR CH 1/10W 15K	
R4946	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R4947	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R4948	ERJ6GEYJ106V	M.RESISTOR CH 1/10W 10M	
R6001	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R6002	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R6003	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	
R6004	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	

Ref. No.	Part No.	Part Name & Description	Remarks
R6005	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R6008	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R6009	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R6011	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6012	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6013	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R6014	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R6015	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R6016	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R6017	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R6018	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R6019	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R6020	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	
R6021	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R6022	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R6023	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R6025	ERJ6GEYJ433V	M.RESISTOR CH 1/10W 43K	
R6026	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	
R6029	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6030	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R6031	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	
R7302	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R7305	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7306	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7316	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	
R7324	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R7325	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	
R7327	ERJ3GEYJ822V	M.RESISTOR CH 1/16W 8.2K	D0GB822JA002
R7328	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R7329	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	
R7501	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R7502	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7503	ERJ6GEYJ432V	M.RESISTOR CH 1/10W 4.3K	
R7504	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R7505	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7506	ERJ6GEYJ432V	M.RESISTOR CH 1/10W 4.3K	
R7507	ERDS2TJ560	C.RESISTOR 1/4W 56	
R7508	ERDS2TJ560	C.RESISTOR 1/4W 56	
R7509	ERJ6GEYJ750	M.RESISTOR CH 1/10W 75	
R7510	ERDS2FJ821	C.RESISTOR 1/4W 820	
R7511	ERDS2FJ821	C.RESISTOR 1/4W 820	
R7513	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7514	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7515	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7516	ERJ6GEYJ303	M.RESISTOR CH 1/10W 30K	
R7517	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7518	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7519	ERJ6GEYJ432V	M.RESISTOR CH 1/10W 4.3K	
R7521	ERJ6GEYJ223	M.RESISTOR CH 1/10W 22K	
R7534	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	
R7535	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	
R7536	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	
R7537	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	
R7538	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	

Ref. No.	Part No.	Part Name & Description	Remarks
R7539	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	
R7601	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7604	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7605	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7606	ERDS2FJ331	C.RESISTOR 1/4W 330	
R7607	ERDS2FJ331	C.RESISTOR 1/4W 330	
R7608	ERJ6GEYJ151V	M.RESISTOR CH 1/10W 150	
R7610	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R7611	ERJ6GEYJ471	M.RESISTOR CH 1/10W 470	
R7613	ERJ6GEYJ151V	M.RESISTOR CH 1/10W 150	
R7614	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7615	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
R7616	ERJ6GEY0R00V	M.RESISTOR CH 1/10W 0	D0GBR00JA017
R7701	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7702	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7703	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R7704	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	
R7705	ERJ6GEYJ564V	M.RESISTOR CH 1/10W 560K	
R7706	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R7707	ERJ6GEYJ125V	M.RESISTOR CH 1/10W 1.2M	
R7708	ERJ6GEYJ125V	M.RESISTOR CH 1/10W 1.2M	
R7709	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	
R7710	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	
R7711	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R7712	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7713	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7714	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7715	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R7716	ERJ6GEYJ472V	M.RESISTOR CH 1/10W 4.7K	
R7717	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	
R7718	ERJ6GEYJ273	M.RESISTOR CH 1/10W 27K	
R7719	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	
R7720	ERJ6GEYJ224	M.RESISTOR CH 1/10W 220K	
R7721	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R7722	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R7723	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	
R7724	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R7725	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	
R7727	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	
R7729	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7730	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7731	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	
R7733	ERJ6GEYJ101V	M.RESISTOR CH 1/10W 100	
S1501	K0G934A00002	SWITCH	K0ZZ00000452
S7501	EVQ11G07K	SWITCH	
S7502	EVQ11G07K	SWITCH	
S7503	EVQ11404M	SWITCH	
S7504	EVQ11404M	SWITCH	
S7505	EVQ11L07B	SWITCH	
S7506	EVQPC005B	SWITCH	
S7507	K0C111A00003	SWITCH	
S7511	EVQ11L07B	SWITCH	
S7512	EVQ11G07K	SWITCH	

Ref. No.	Part No.	Part Name & Description	Remarks
S7513	EVQ11L07B	SWITCH	
S7514	EVQ11G07K	SWITCH	
S7515	EVQ11L07B	SWITCH	
S7516	EVQ11G07K	SWITCH	
S7517	EVQ11L07B	SWITCH	
T0701	EQV5EC081P	TRANSFORMER	
T1101	ETS29AZ286AC	SWITCHING TRANSFORMER	⚠ [MAVD]
T4002	EQQ7QF024P	TRANSFORMER	
TU7601	ENG47329G1	TUNER	⚠ [MAVD]
VR0701	EVNCYAA03B14	V.RESISTOR 10K	
X0701	VLF1430	TRANSFORMER	J0B3955A0001
X0702	VLF1431	TRANSFORMER	J0B4055A0001
X0704	VLF1497	TRANSFORMER	
X3001	VSX0162	CRYSTAL OSCILLATOR	
X6001	VSX1022	CRYSTAL OSCILLATOR	
X6002	H0H200500011	CRYSTAL OSCILLATOR	[MAVD]
X7302	H0D245500016	CRYSTAL OSCILLATOR	[MAVD]
		MISCELLANEOUS	
	EYF52BC	FUSE HOLDER	
	EYF52BC	FUSE HOLDER	
	VSC4998	HA ANGLE	
	VSC4752	SHIELD CASE (MAIN)	FOR NICAM DECODER C.B.A.
	VMP5897	CONNECTING ANGLE	FOR TV DEMODULATOR C.B.A.
■	----------	CYLINDER STATOR C.B.A.	
		MISCELLANEOUS	
	VJS3537F009G	CONNECTOR (FEMALE) 9P	K1MN09B00039
	HW-300A-DF	HALL IC	B4AAB0000007

12. Schematic Diagram for printing with A4 size

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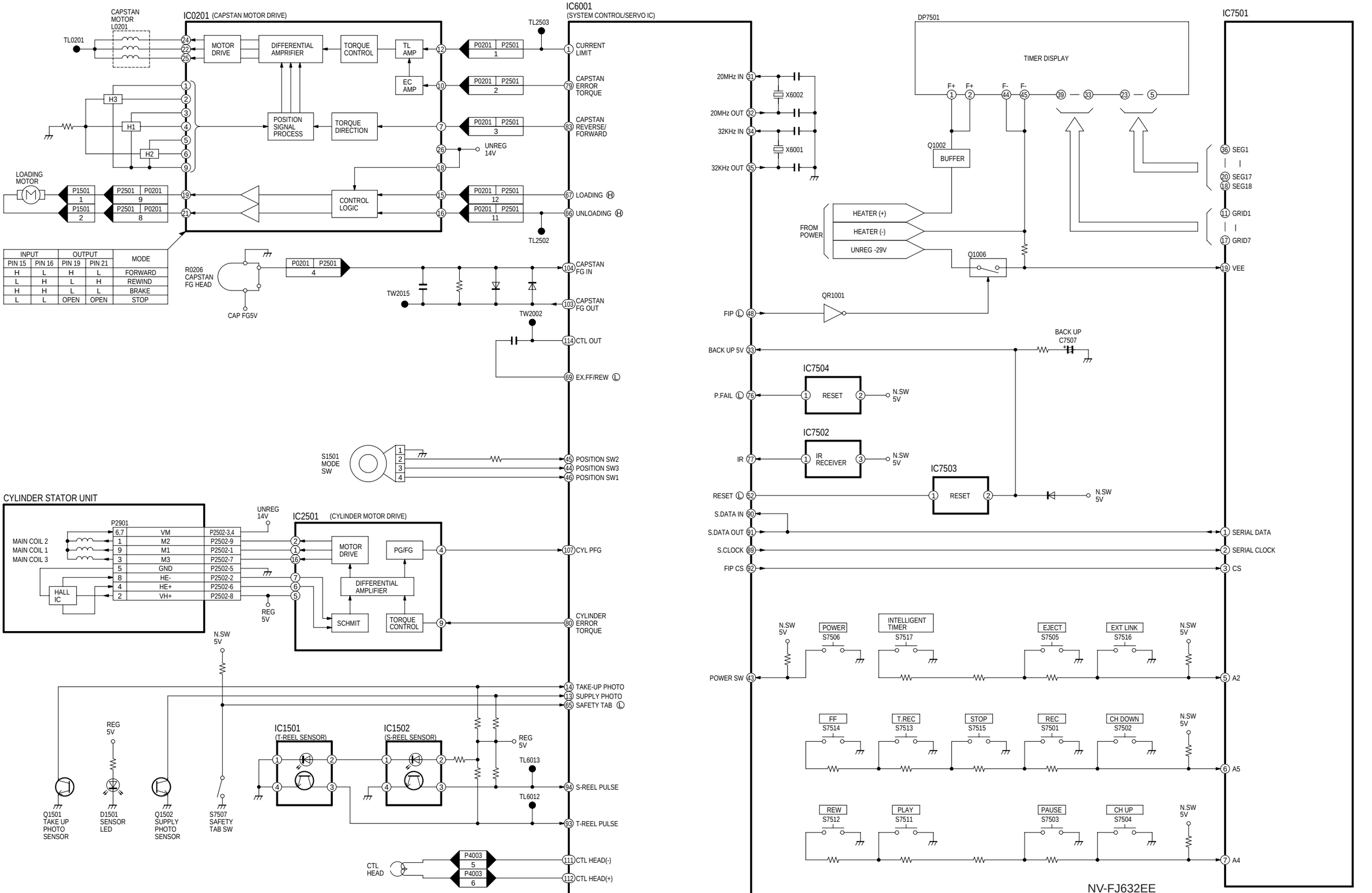
MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

JK4903 (AV1) TV
AUDIO OUT (R)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO IN (L)
TW4907
TW4903
TW4902
QR4502 MUTE
QR4501 MUTE
JK4901
AUDIO OUT (R)
AUDIO OUT (L)
TW4901
JK4902 (AV2) DECODER/EXT
AUDIO OUT (R)
AUDIO IN (R)
AUDIO OUT (L)
AUDIO IN (L)
QR4503 MUTE
QR4504 MUTE
SWITCH RCH
SWITCH LCH
INPUT SELECT SWITCH RCH
INPUT SELECT SWITCH LCH
OUTPUT SELECT SWITCH RCH
OUTPUT SELECT SWITCH LCH
PNR RCH
PNR LCH
AGC & SWITCH
FM MODULATOR/ DEMODULATOR
LPF
BPF
IIC BUS INTERFACE
SYS IIC CLOCK
SYS IIC DATA
TO/FROM SYSTEM CONTROL
VCO F0
FSC
FROM LUMINANCE & CHROMINANCE
AUDIO H.SW
FROM SYSTEM CONTROL
D.FM REC Ⓗ
PREAMP & SWITCH
AGC
P3502 8
P3502 9
P3502 10
L
R
Hi-Fi AUDIO HEAD
TO TUNER
RFC AUDIO OUT
QR4506 MUTE
TUNER AUDIO (R)
TUNER AUDIO (L)
FROM DECODER
IC3001
SW GAIN
ALC
NORMAL SELECT SWITCH
FROM DECODER/ TV DEMODU
TUNER AUDIO (N)
A.HEAD (W)
A.HEAD (R)
TO/FROM AC HEAD

NV-FJ632EE
AUDIO BLOCK DIAGRAM



NV-FJ632EE
SYSTEM CONTROL & SERVO BLOCK DIAGRAM

MAIN SIGNAL PATH IN REC MODE

MAIN SIGNAL PATH IN PLAYBACK MODE

TO/FROM SYSTEM CONTROL

VIDEO OUT

Y/C VIDEO OUT

Q4904

AMP

IC4901

TO TUNER

RFC VIDEO OUT

20

CLAMP

FROM TV DEMODULATOR

TUNER VIDEO

7

CLAMP

TO SYSTEM CONTROL

C SYNC

JK4903 (AV1) TV

8 PB +12V

7 BLUE

11 GREEN

15 RED

16 BLANKING

19 VIDEO OUT

20 VIDEO IN

TW3003

TW3002

36

CLAMP

18

34

FROM SYSTEM CONTROL

ART V/H/N

JK4902 (AV2) DECODER/EXT

33 PB Ⓗ

PS 12V

Q4903

8 PB +12V

7 BLUE

11 GREEN

15 RED

16 BLANKING

19 VIDEO OUT

20 VIDEO IN

26

28

CLAMP

Q4901

QR4903

FROM SYSTEM CONTROL

AV1 PB Ⓗ

16 RGB OFF Ⓗ

PS 12V

TO/FROM SYSTEM CONTROL

SYS IIC CLOCK

SYS IIC DATA

TO/FROM SYSTEM CONTROL

OSD IIC DATA

OSD IIC CLOCK

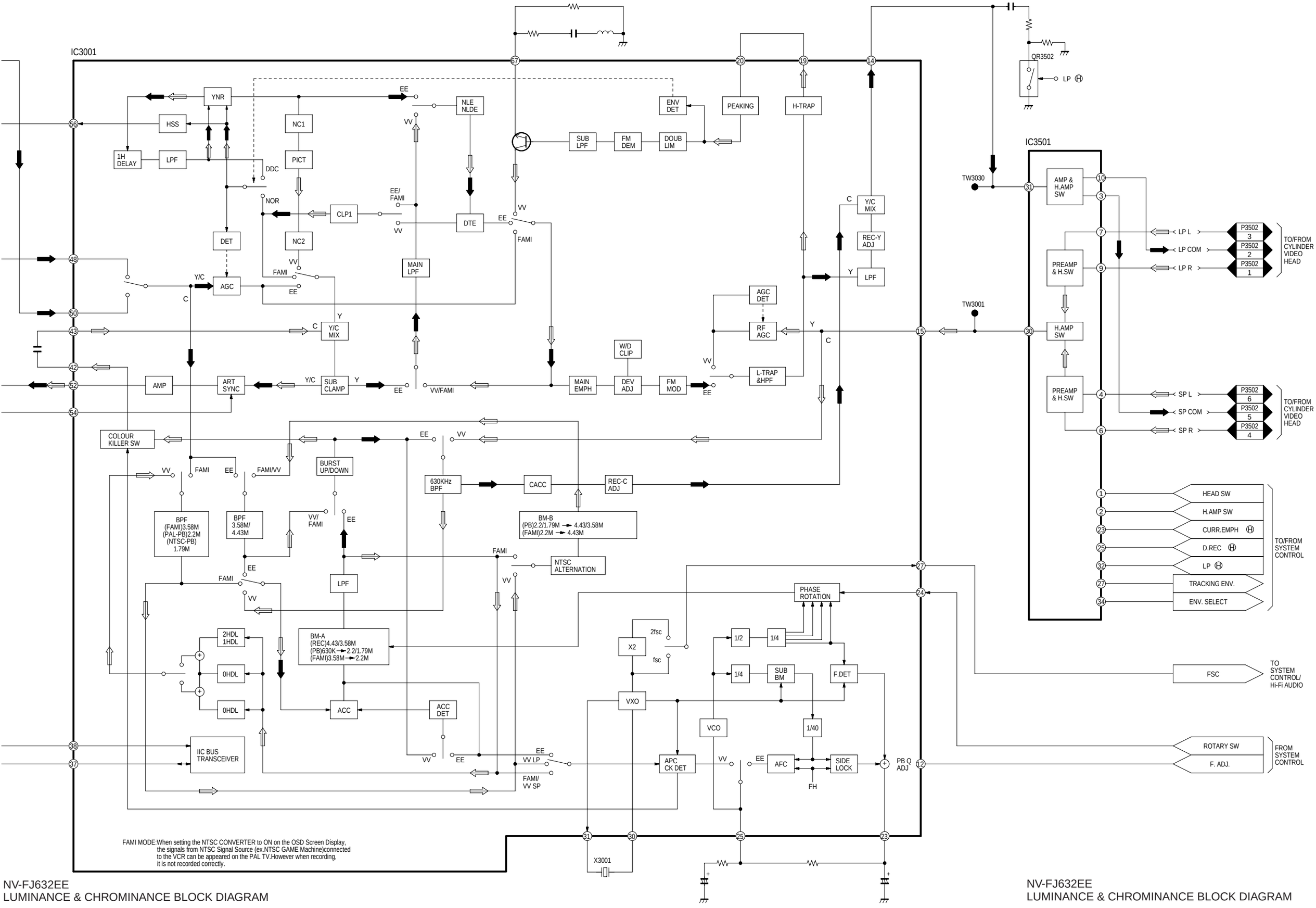
2

3

IIC BUS INTERFACE

NV-FJ632EE

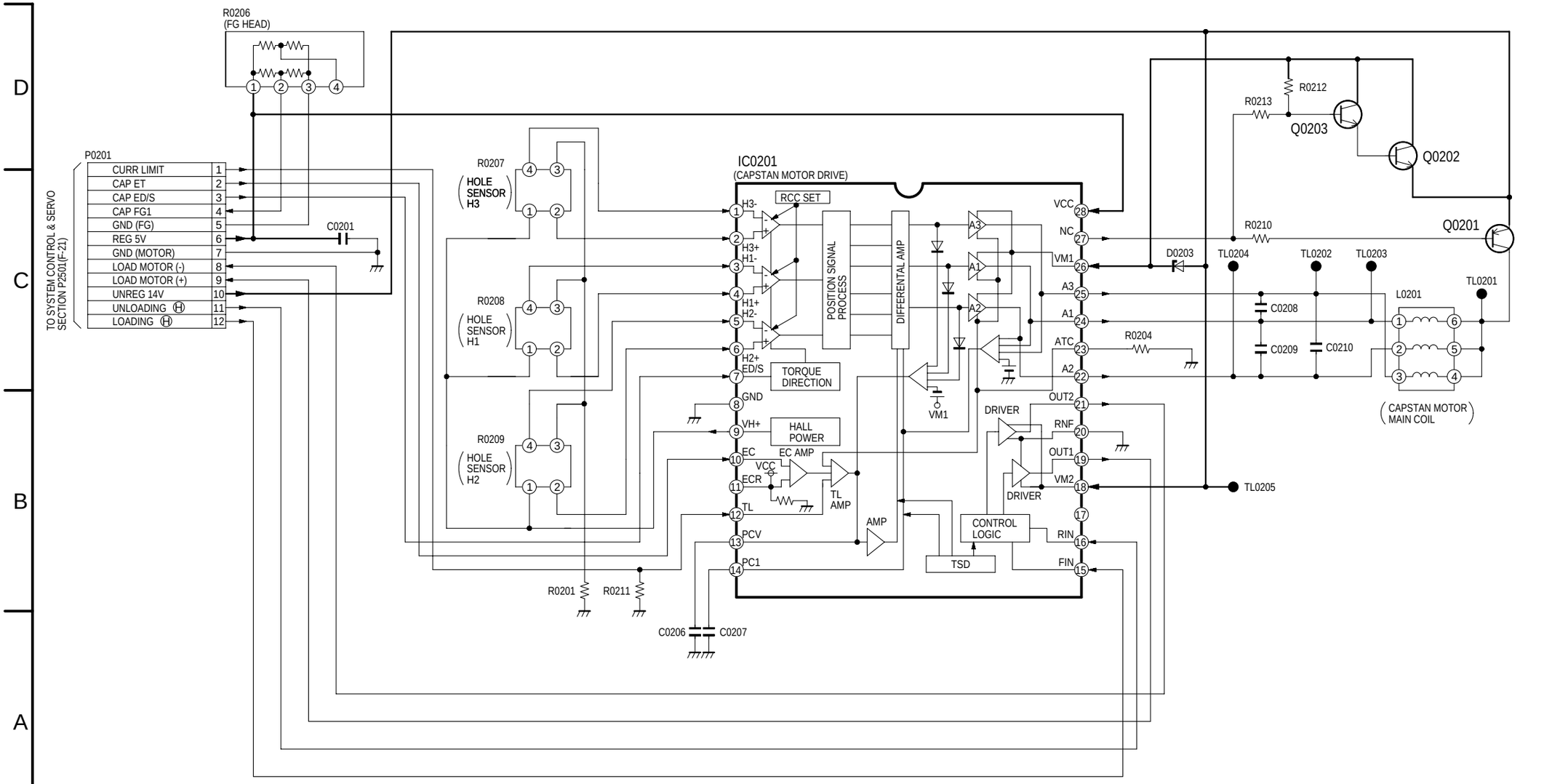
LUMINANCE & CHROMINANCE BLOCK DIAGRAM



FAMI MODE:When setting the NTSC CONVERTER to ON on the OSD Screen Display, the signals from NTSC Signal Source (ex.NTSC GAME Machine)connected to the VCR can be appeared on the PAL TV.However when recording, it is not recorded correctly.

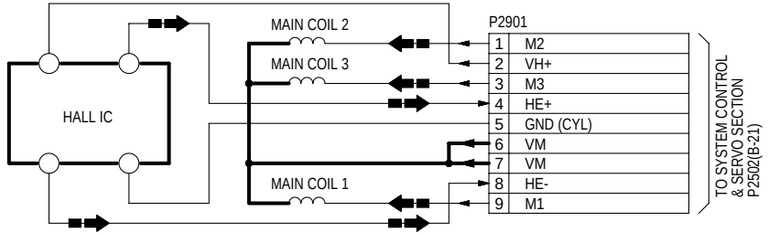
NV-FJ632EE
LUMINANCE & CHROMINANCE BLOCK DIAGRAM

NV-FJ632EE
LUMINANCE & CHROMINANCE BLOCK DIAGRAM



NV-FJ632EE
CAPSTAN UNIT SCHEMATIC DIAGRAM

CYLINDER SERVO SPEED LOOP



NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
CYLINDER STATOR
SCHEMATIC DIAGRAM

A

1 2 3

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓥ :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
Ⓘ :TO INPUT/OUTPUT SECTION

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

(S) MUTE (H) (A4)
(S) SYS IIC CLOCK (A3)
(S) SYS IIC DATA (A2)
(V) FSC (A1)

(I) AUDIO OUT2 (R)
(I) AUDIO OUT2 (L)
(I) AUDIO OUT1 (R)
(I) AUDIO OUT1 (L)
(V) FM MUTE
(R) PS 5V
(R) PS 12V
(R) GND
(R) GND (N)
(V) AUDIO IN (N)
(V) AUDIO OUT (N)
(R) RFC AUDIO OUT
(S) AUDIO MUTE (H)

R4529 220
R4531 220
R4536 220
R4535 220
L4502 1.2u
L4501 0
C4537 0.01
C4538 16V47
R4528 390
C4529 16V10
C4530 16V10
C4531 16V10
C4532 16V10
C4533 16V10
C4534 10V22
C4535 0
C4536 0.1
R4527 4700

QR4503 UN2216 (MUTE)
QR4504 UN2216 (MUTE)
QR4502 UN2216 (MUTE)
QR4501 UN2216 (MUTE)
QR4505 UN2113 (BUFFER)
QR4506 UN2216 (MUTE)

R4537 0
C4528 16V10
R4524 1K
R4525 1K
R4522 30K
R4538 1K
C4521 16V10
C4520 16V22
R4523 4700
R4521 510
C4522 0.047
C4523 10V33
R4520 120K
C4519 0.015
C4518 0.22

IIC BUS INTERFACE
SWITCH RCH
SWITCH LCH
OUTPUT SELECT SWITCH RCH
OUTPUT SELECT SWITCH LCH
NORMAL OUTPUT SWITCH
DET
VCO-FO
VCC
GND(R)
REC AGC ADJ.
MUTE CONTROL
PNR RCH
AGC & SWITCH
FM MODULATOR/ DEMODULATOR
LPF
BPF
AGC
REC AGC DET
ENV.DET OUT
REC DC2
PREAMP & SWITCH
PNR LCH
INPUT SWITCH RCH
INPUT SWITCH LCH
VREF
GND (L)

TW4502
TW4501
TL4503
R4519 820
R4508 680
D4502 MA165
C4516 0.1
C4513 0.01
C4512 150P
C4511 150P
C4510 0.01
C4509 0.033
C4508 0.015
C4507 16V22
C4506 16V10

IC4501
AN3656NFBPBV

C4540 0.1
C4541 0.1
C4501 16V10
C4502 16V10
C4503 16V10

R4510 10K
R4517 22K
R4511 5600
R4509 68K
R4504 5600
R4503 68K
R4513 10K
R4518 22K
R4514 5600
R4512 68K
R4502 5600
R4501 68K

R4516 510
R4515 4700
C4504 0.047
C4505 10V33
C4515 6V100
C4514 0.01

(R) TUNER AUDIO (R) (B1)
(I) AUDIO IN1 (R) (B2)
(I) AUDIO IN2 (R) (B3)
(R) TUNER AUDIO (L) (B4)
(I) AUDIO IN1 (L) (B5)
(I) AUDIO IN2 (L) (B6)
(V) AUDIO HEAD COM (B7)
(V) AUDIO HEAD R (B8)
(V) AUDIO HEAD L (B9)
(S) A.HEAD SW (B10)
(S) ABS NORMAL (H) (B11)
(S) D.FM REC (H) (B12)

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
Hi-Fi AUDIO SECTION SCHEMATIC DIAGRAM

VIDEO MAIN SIGNAL PATH IN REC MODE

VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

Ⓡ:TO POWER SUPPLY/RF SECTION
Ⓢ:TO SYSTEM CONTROL & SERVO SECTION
Ⓥ:TO LUMINANCE & CHROMINANCE/AUDIO SECTION
Ⓐ:TO Hi-Fi AUDIO SECTION

Ⓡ PS 12V
Ⓡ PS 5V
Ⓡ N.SW 5V
Ⓢ AV2 PB 12V
Ⓐ AUDIO IN2 (R) (A13)
Ⓐ AUDIO IN2 (L) (A12)
Ⓐ AUDIO OUT2 (L) (A11)
Ⓐ AUDIO OUT2 (R) (A10)
Ⓐ AUDIO IN1 (R) (A9)
Ⓐ AUDIO IN1 (L) (A8)
Ⓐ AUDIO OUT1 (L) (A7)
Ⓐ AUDIO OUT1 (R) (A6)
Ⓢ PROJ. 50 (A5)
Ⓢ AV1 PB 12V (A4)
Ⓢ AV1 PB Ⓗ (A3)
Ⓡ RFC VIDEO OUT (A2)
Ⓢ VIDEO OUT (A1)

IC4901
LA73021M

L4903 68u
L4902 68u
C4925 0.1
C4926 6V220
C4920 0.1
C4921 6V220
R4905 22K
R4904 15K
R4915 470
C4916 0.1
D4903 MA165
C4919 0.1
C4923 0.1
C4928 0.1
R4948 10M
R4947 100
R4926 100
R4928 0
Q4904 2SB709A (AMP)
R4909 22K
Q4901 2SD601A (AV1 PB Ⓗ:ON)
R4945 15K
R4946 22K
R4910 470K
D4904 MA165
R4902 470

FSS OUT
6dB
SW1
SW3
SW2
CLAMP
AMP
BUF

SERIAL CONTROL
POWER SAVE
IIC BUS INTERFACE
EXT CTL 4
EXT CTL 2
V REF
RIPPLE FLT
EXT CTL 3
EXT CTL 1

GND
N.SW 5V
PS 5V
12V

R4938 220
C4937 0.1
C4929 0.1
C4930 0.1
C4942 0.1
R4942 0
C4941 0.1
L4904 0

Ⓢ SLEEP Ⓗ
Ⓢ OSD IIC DATA
Ⓢ OSD IIC CLOCK

Ⓡ TUNER VIDEO (B1)
Ⓥ VIDEO IN (B2)
Ⓢ PROG. Ⓗ (B3)
Ⓡ GND
Ⓡ GND (A)

R4941 10K

TW4903
TW4907
LB4902 220
LB4901 220
C4901 220P
C4902 220P
JK4901 VJJ0377
AUDIO OUT (L)
AUDIO OUT (R)

LB4906 220
LB4905 220
C4915 470P
C4914 470P

TW4906
JK4903 K1FB121B0003 (AV1)

TW4902
TW4901
R4918 330
R4916 330
C4913 470P
C4912 470P
C4909 47P
C4910 47P
L4901 0.22u

TV

1	AUDIO OUT (R)
2	AUDIO IN (R)
3	AUDIO OUT (L)
4	GND (A)
5	GND
6	AUDIO IN (L)
7	BLUE
8	PB +12V
9	GND
10	CONTROL
11	GREEN
12	———
13	GND
14	GND
15	RED
16	BLANKING
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN
21	GND

TW3003
TW3002
R4913 75
R4914 75

Q4903 2SD601A (RGB ON:ON)
R4903 4700
QR4903 UN2212 (RGB OFF Ⓗ:ON)

LB4904 220
LB4903 220
C4905 470P
C4906 470P

JK4902 K1FB121B0003 (AV2)

R4912 330
R4906 330
C4903 470P
C4904 470P
C4907 47P
C4908 47P

R4908 75
R4911 75

DECODER/EXT

1	AUDIO OUT (R)
2	AUDIO IN (R)
3	AUDIO OUT (L)
4	GND
5	GND
6	AUDIO IN (L)
7	BLUE
8	PB +12V
9	GND
10	IIC CLOCK
11	GREEN
12	IIC DATA
13	GND
14	GND
15	RED
16	BLANKING
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN
21	GND

QR4905 UN2215 (PROG Ⓗ:ON)
QR4904 UN2215 (PROG Ⓗ:ON)
D4902 MA4051NM
D4901 MA4051NM

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
INPUT/OUTPUT SECTION
SCHEMATIC DIAGRAM

AUDIO SIGNAL PATH

L7302
1u

X7302
VSX0953

C7316
0.1

R7327
8200

R7325
0

TEST1 (22) 3.3
VDDA2 (21)
VSSA2 (20)
VDDR2 (19) 2.0
1 REF (18)
TEST2 (17)
TP3 (16) 1.6
XTAL I (15) 1.6
XTAL O (14)
ADDR1 (13) 0.4
PCLK (12)

SIF2 (23) 2.0
C7315 0.1
VREF1 (24) 2.0
SIF1 (25) 2.0
CRESET (26) 4.9
VSSA3 (27)
VDDA3 (28) 4.9
SCL (29) 4.8
SDA (30) 4.6
SDO (31) 1.2
WS (32) 1.2
SCK (33) 1.2

INPUT SWITCH AGC, ADC
FM/AM DEMODULATION
IDENTIFI-CATION
IIC BUS INTERFACE
IIC BUS INTERFACE
POST FILTER 3 DACS
ANALOG CROSSBAR SWITCH

NICAM DEMODULATION
DEMATRIX
2 CHANNEL ANALOG/ SATELLITE DECODER
NICAM DECODER
DIGITAL SELECTOR
LEVEL ADJUST
2 CHANNEL OUTPUT BUFFERS
MONO CHANNEL OUTPUT BUFFERS

TP1 (11)
NICAM (10) 0.4
TP2 (9)
VDEC2 (8) 0
VSSD2 (7)
VDDD1 (6) 4.8
VSSD1 (5)
VSSA1 (4)
VDDA1 (3) 4.9
OUT R (2) 2.5
OUT L (1) 2.5

SYS CLK (34) 1.2
VDDD3 (35) 4.8
VSSD3 (36)
P1 (37) 4.9
MONO IN (38) 2.4
EXTIR (39) 2.4
EXTIL (40) 2.4
VREF2 (41) 2.4
P2 (42) 4.9
OUT M (43) 2.5
VSSA4 (44)

IC7301
TDA9874AH

PK7301
QPSK/SIF 1
GND 2
TUNER AUDIO (N) 3
4
5
6
TUNER 5V 7
TO POWER SUPPLY/RF SECTION PK7301 (C-10)

PK7302
SYS IIC CLOCK 1
SYS IIC DATA 2
3
TUNER AUDIO (R) 4
GND 5
TUNER AUDIO (L) 6
TO POWER SUPPLY/RF SECTION PK7302 (B-10)

C7307 0.01
R7302 0
C7311 0
C7343 2200P
L7301 0
C7308 50V2.2
C7312 22P
R7305 100
R7306 100
C7305 33P
C7306 33P
C7304 6V100
C7301 0.01
FL7301 VLF0633
C7341 4700P
C7342 4700P

IC7302
PST7043
(RESET)
IN GND OUT

R7316 10K
LB7303 0
TL7301
TL7303
C7313 0.1
C7318 6V47
TL7304
R7324 220
C7317 16V10
R7328 220
C7319 16V10
R7329 220
C7320 16V10

LB7301 0
C7325 0.1
C7324 0.1

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
NICAM DECODER PACK SCHEMATIC DIAGRAM

F E D C B A

1 2 3 4 5 6 7 8

CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

HOT

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓣ :TO TIMER SECTION

P1102 VJS4121
AC INLET
F1101 VSF0243C16
D1101 ERZVA5Z471
L1101 ELF15N005A
L1102 ELF15N003A
LB1102 J0JHC0000070
C1102 1000P
C1101 0.068
D1103 DF08S-6622
LB1107 J0JKB0000028
R1102 1M
R1103 1M
C1106 400V33
LB1109 J0JKB0000028
T1101 ETS29AZ286AC
P2
P1
B2
B1
S7
S6
S5
S4B
S4A
S2
S3
S1
HEATER DC (-)
HEATER DC (+)
UNREG -29V
UNREG 14V
UNREG 6V
UNREG 36V
GND
TO BOTTOM PLATE
C1206 10V100
D1209 11EQS04
D1208 MA185
C1205 50V56
D1204 21DQ10FC4
L1201 22u
C1203 25V820
C1209 25V100
R1206 33K
R1207 33K
D1206 11EQS04
L1202 22u
D1207 11EQS04
C1204 10V1800
C1208 10V330
D1201 MA185
C1202 50V56
D1107 MA7510
LB1106 J0JHC0000070
C1112 1000P
Q1101 2SK2876 (VOLTAGE CONTROL)
R1104 1K
R1105 100
C1107 270P
C1201 3300P
LB1210 0
LR1101 VLP0392
Q1102 FS4KM-12A-AS (VOLTAGE CONTROL)
R1110 100K
C1108 0.022
R1106 330
D1108 B0HAGN000006
R1107 100
Q1103 2SC3311A (VOLTAGE CONTROL)
R1108 0.51 (1W)
Q1104 2SD1992A (VOLTAGE CONTROL)
R1109 1800
D1104 MA4027L
D1106 MA185
C1109 0.047
D1105 MA165
C1110 0.1
R1112 3.3
R1111 330
R1113 33
C1111 0.01
Q1201 PC123ZY2
IC1201 uPC1093J
R1202 270
R1201 2200
C1207 0.1
R1204 12K
R1203 22K
R1208 8200
R1209 56K
R1205 2200

NOTE1:WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORMER CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚
NOTE2:THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WHEN INPUT AC IS 240V.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-FJ632EE
POWER TRANSFORMER
SECTION SCHEMATIC DIAGRAM

Ⓟ :TO POWER TRANSFORMER SECTION
Ⓢ :TO SYSTEM CONTROL & Sservo SECTION
Ⓥ :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
Ⓐ :TO Hi-Fi AUDIO SECTION
Ⓘ :TO INPUT/OUTPUT SECTION
Ⓣ :TO TIMER SECTION

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

Q1002 2SD602A (BUFFER)
Q1006 2SD601A (FIP ON/OFF CONTROL)
QR1001 UN2112 (FIP Ⓛ :ON)
Q1008 2SB710A (POWER SAVE:OFF)
QR1002 UN2211 (SLEEP Ⓛ :OFF)
Q1007 2SC1959Y (12V REG.)
Q1010 2SC1959Y (5V REG.)
Q1001 2SC1959Y (5V REG.)
Q1011 2SD601A (POWER OFF Ⓗ :ON)
Q1005 2SD602A (5V REG.)
Q1003 2SC1959Y (5V REG.)
Q1004 2SC1959Y (5V REG.)

TU7601 TUNER UNIT ENG47329G1
1 N.SW 5V
2 AUDIO OUT
3 DATA
4 PS 5V
5 CLOCK
6 VIDEO OUT
7
8
9
10
11 CLOCK
12 DATA
13
14 TUNER 5V
15 SW1
16 BTL 30V
17 IF OUT
18 IF IN

DU7601 TO TV DEMODULATOR PACK PK0701(D-1)
19 SW1 PK0701-1
20 SW2 PK0701-2
21 PK0701-3
22 SIF/QPSK PK0701-4
23 AFC S-CURVE PK0701-5
24 TUNER VIDEO PK0701-6
25 TUNER 5V PK0701-7
26 PK0701-8
27 GND PK0701-9

PK7301 TO NICAM DECODER PACK PK7301(D-1)
1 SIF/QPSK
2 GND
3 TUNER AUDIO (N)
4
5
6
7 TUNER 5V

PK7302 TO NICAM DECODER PACK PK7302(C-1)
1 SYS IIC CLOCK
2 SYS IIC DATA
3
4 TUNER AUDIO (R)
5 GND
6 TUNER AUDIO (L)

HEATER DC (-)
HEATER DC (+)
HEATER (+)
UNREG -29V
FIP -29V
FIP Ⓛ
SLEEP Ⓛ
UNREG 36V
UNREG 14V
GND
GND
GND
GND
GND (A)
GND (FG)
GND (MOTOR)
GND (CYL)
UNREG 6V
POWER OFF Ⓗ
VIDEO 5V
REG 5V
PS 12V
PS 5V
BIAS 5V
N.SW 5V
SYS IIC DATA
SYS IIC CLOCK
TUNER AUDIO (L)
TUNER AUDIO (R)
TUNER AUDIO (N)
AFC S-CURVE
TUNER VIDEO
SW2
RFC VIDEO OUT
RFC AUDIO OUT

R1003 56K
R1004 56K
R1009 22K
R1008 22K
R1011 5600
R1006 10K
R1007 10K
R1027 10K
R1001 68K
R1002 68K
R1025 4700
R1026 10K
R1010 10K
R1023 10K
R1012 470
R1017 470
R1029 5600
R1030 5600
R7607 330
R7606 330
R7615 100
R7611 470
R7610 470
R7614 100
R7613 150
R7608 150
R7616 0
R7604 100
R7605 100
R7601 0
L7609 10u
L7603 27u
L7602 27u
L7601 33u
L7604 2.2u
LB7602 0
L7605 0
L7608 2.2u
L7607 10u

C1026 0.1
C1025 0.1
C1011 0.1
C1001 0.1
C1003 0.1
C1006 0.1
C7623 0.01
C7627 0.01
C7603 6V100
C7604 6V100
C7615 33P
C7614 33P
C7616 6V100
C7617 0.01
C7610 50V1
C7620 0.1
C7613 0.01
C7625 2200P
C7626 2200P
C1012 10V22
C1010 25V47
C1002 10V47
C1008 25V47

D1005 0
D1008 MA4130NL
D1012 0
D1004 MA4056NH
D1010 0
D1003 MA4056NH
D1002 0
D1006 MA4056NH
D1007 0
D7601 MA4300M

A1 A2 A4 A5 A6 A7 A8 A9 A10 A11

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
POWER SUPPLY/RF SECTION
SCHEMATIC DIAGRAM

G F E D C B A
1 2 3 4 5 6 7 8 9 10

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓥ :TO LUMINANCE & CHROMINANCE/AUDIO SECTION
Ⓐ :TO Hi-Fi AUDIO SECTION
Ⓘ :TO INPUT/OUTPUT SECTION
Ⓣ :TO TIMER SECTION

CAPSTAN SERVO SPEED LOOP
CAPSTAN SERVO PHASE LOOP
CYLINDER SERVO SPEED LOOP
CYLINDER SERVO PHASE LOOP

IC6001
C2CBJG000215

IC1502
RPI354N
(S-REEL)

IC1501
RPI354N
(T-REEL)

Q1501
PNB2301MBV
(T-PHOTO)

Q1502
PNB2301MAV
(S-PHOTO)

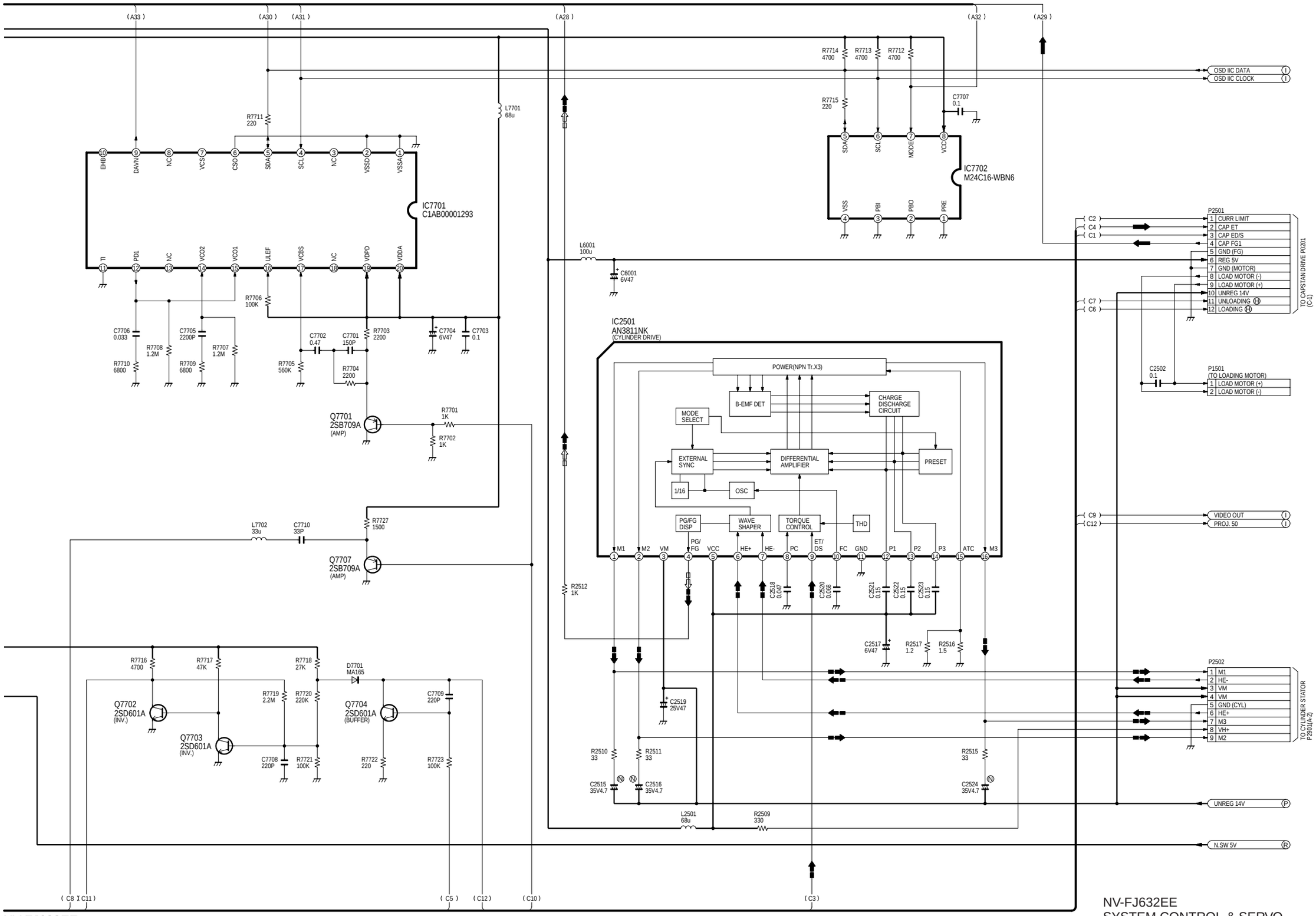
SENSOR
D1501
SIR505S

MODE SW
S1501
K0G934A-00002

QR6001
UN2215
(AV1 PB Ⓛ:OFF)

QR6006
UN2211
(SLEEP Ⓛ:OFF)

NV-FJ632EE
SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM



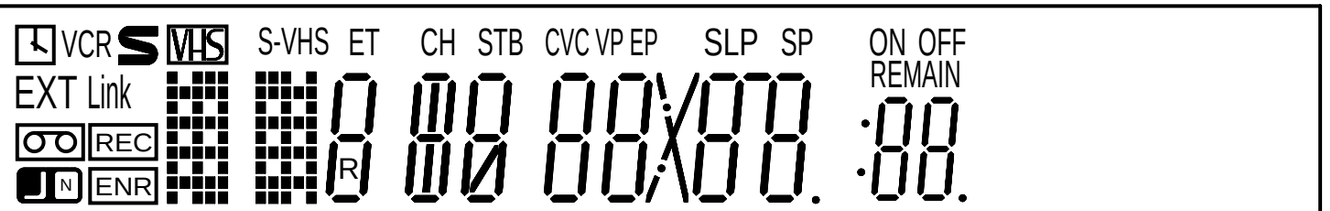
NV-FJ632EE
SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

Ⓟ :TO POWER TRANSFORMER SECTION
Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION

DP7501
A2BD00000040



R7507 56
R7508 56
C7501 0.01
D7501 MA4220NM
C7502 50V10
R7511 820
R7510 820
R7509 75
Ⓡ HEATER (+)
Ⓟ HEATER DC (-)
Ⓡ FIP -29V

F+ F+ P1 P2 P3 P4 P5 P6 P7 P8 NC P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 NC NC NC NC NC NC NC NC NC 1G 2G 3G 4G 5G 6G 7G NC NC F- F-
1 2 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 44 45

-28.4 -28.3 -29.0 -29.4 -28.3 -28.1 -28.5 -24.3 -29.0 -24.3 -24.1 -24.3 -19.0 -24.3 -24.1 -14.3 -29.4 -29.4
36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20 19
S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17 VEE

IC7501
M35502AFP

4.9 5.0 2.4 5.2 5.2 5.2 5.2 2.3 5.2 -24.8 -24.8 -24.8 -24.8 -24.8 -24.8 -24.8 -29.4
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
S DATA S CLOCK CS Ⓛ A3 A2 A5 A4 VSS OSC VCC G1 G2 G3 G4 G5 G6 G7 S18

C7503 12P

Ⓢ S.DATA
Ⓢ S.CLOCK
Ⓢ FIP CS
Ⓢ SAFETY TAB Ⓛ
Ⓢ POWER SW
Ⓢ IR
Ⓡ N.SW 5V
Ⓡ GND
Ⓢ P.FAIL Ⓛ
Ⓢ RESET Ⓛ
Ⓢ BACK UP 5V

SAFETY TAB
S7507 K0C111A00003

POWER
S7506 EVQPC005B
R7521 22K

IC7502
PNA4618M08V
(IR RECEIVER)
R OUT GND VCC
5.2 5.2

R7517 10K
R7518 10K
R7513 30K
R7515 30K
R7516 30K
R7514 30K

IC7504
C0EBH0000218
(RESET)
5.2 RST
5.2 VDD
VSS
C7511 0.1

IC7503
C0EBE0000211
(RESET)
4.9 OUT
4.9 VDD
GND
CD 4.4
0
C7504 6V100
C7510 0.01
R7535 10K
C7509 6800P

D7503 RB441PT-77
R7534 180
C7507 VCE0073
C7508 6V220

CH UP S7504 EVQ11404M
PAUSE S7503 EVQ11404M
PLAY S7511 EVQ11L07B
REW S7512 EVQ11G07K
R7506 4300
R7505 5600
R7504 8200
R7537 12K

CH DOWN S7502 EVQ11G07K
REC S7501 EVQ11G07K
STOP S7515 EVQ11L07B
TIMER REC S7513 EVQ11L07B
FF S7514 EVQ11G07K
R7503 4300
R7502 5600
R7501 8200
R7538 12K

EXT LINK S7516 EVQ11G07K
EJECT S7505 EVQ11L07B
INTELLIGENT TIMER S7517 EVQ11L07B
R7519 4300
R7536 5600
R7539 8200

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
TIMER SECTION
SCHEMATIC DIAGRAM

F E D C B A
1 2 3 4 5 6 7 8 9

VIDEO SIGNAL PATH

AUDIO SIGNAL PATH

R0714 5600
R0732 4700
R0731 100
LB0701 VLP0147
R0713 0
R0740 270
C0724 220P
R0717 470
R0711 180
R0745 3.3M
C0707 50V2.2
T0701 EVQ5EC081P
R0709 100K
R0727 0
C0719 0.1
C0708 50V 0.47
C0717 33P
R0742 150
Q0702 2SD601A (AMP)
R0741 220
C0721 56P
R0743 1K

PK0701

DU7601-19	SW1	1
DU7601-20	SW2	2
DU7601-21	———	3
DU7601-22	SIF/QPSK	4
DU7601-23	AFC S-CURVE	5
DU7601-24	TUNER VIDEO	6
DU7601-25	TUNER 5V	7
DU7601-26	———	8
DU7601-27	GND	9

TO POWER SUPPLY/ RF SECTION DU7601 (D-10)

1.6 2.4 2.6 5.0

IC0701 LA75503

3.1 2.4 1.6 3.0 2.7 2.2 3.3 4.3 4.3 1.8 0 1.3

BPF, BPF, LIM AMP, FM DET, DEEMPHP, AMP SW, EQ AMP, TRAP, S PLL, FIL CONT, VIDEO DET, APC DET, VIF AMP, IF AGC, 1ST SIF DET, 1ST AMP, RF AGC, LPF, VCO, FLL, AGC, AFT AMP

2.6 2.4 2.2 3.3 2.8 2.8 5.0 1.6 0.1 4.0 2.4

D0702 0
C0701 1
R0705 4700
R0708 10K
VR0701 10KB
R0707 39K
C0702 1000P
C0703 1
C0713 6V330
C0714 1
C0704 0.033
R0719 4700
C0712 0.1
X0704 VLF1497
C0710 0.01
L0703 2.2u
R0725 100
L0701 0.27u
X0702 VLF1431
X0701 VLF1430

PP0701 (TO TUNER UNIT)

4MHz	1
AGC	2
IF	3
GND	4

C0715 3P
C0711 16V22
R0715 22K

NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
TV DEMODULATOR PACK SCHEMATIC DIAGRAM

Ⓡ :TO POWER SUPPLY/RF SECTION
Ⓢ :TO SYSTEM CONTROL & SERVO SECTION
Ⓐ :TO Hi-Fi AUDIO SECTION
Ⓘ :TO INPUT/OUTPUT SECTION
Ⓣ :TO TIMER SECTION

VIDEO MAIN SIGNAL PATH IN REC MODE
VIDEO MAIN SIGNAL PATH IN PLAYBACK MODE
AUDIO MAIN SIGNAL PATH IN REC MODE
AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE

P4003
(TO A/C HEAD)
AUDIO ERASE IN 1
GND 2
A.HEAD (R) 3
A.HEAD (W) 4
CTL HEAD (-) 5
CTL HEAD (+) 6

P4002
(TO FULL ERASE HEAD)
FULL ERASE OUT 1
FULL ERASE IN 2

P3502
(TO CYLINDER UNIT)
LP R 1
LP COM 2
LP L 3
SP R 4
SP COM 5
SP L 6
GND 7
AUDIO HEAD L 8
AUDIO HEAD COM 9
AUDIO HEAD R 10

Ⓢ CTL HEAD (+)
Ⓢ CTL HEAD (-)
Ⓢ SHORT DET Ⓛ
Ⓢ BIAS Ⓛ
Ⓢ HEAD SW
Ⓢ H.AMP SW
Ⓢ ENV. SELECT
Ⓢ TRACKING ENV.
Ⓢ D.REC Ⓗ
Ⓢ CURR. EMPH Ⓗ
Ⓡ TUNER AUDIO (N)
Ⓐ FM MUTE
Ⓐ AUDIO OUT (N)
Ⓢ MUTE Ⓗ
Ⓐ AUDIO IN (N)
Ⓐ AUDIO HEAD R
Ⓐ AUDIO HEAD COM
Ⓐ AUDIO HEAD L
Ⓢ D.A.REC Ⓗ
Ⓢ PAL EP Ⓗ
Ⓡ BIAS 5V
Ⓡ VIDEO 5V
Ⓡ GND

R4030 8200
C4032 220P
T4002 EQQ7QF024P
C4031 0.022
C4029 1500P
R4029 3300
0.3 (-0.6)
0.4 (4.7)
Q4006 2SD602A (OSC)
L4003 68u
0.4 (4.9)
C4030 6V220
C4028 0.022
5.0 (4.1)
Q4005 2SB710 (AUDIO ERASE DRIVE)
R4028 2700
C4026 10V22
R4027 3300
5.0
R4026 4700

IC3501
AN3368SB
TW2001
A1 A2
C3002 1000P
C3003 1000P
1 HEAD SW 2.4
2 HEAD AMP SW 0
3 A19 0 (2.7)
4 A20 C3506 0.1 LB3501 VLP0147 0.7 (2.9)
5 GND
6 A18 C3507 0.1 LB3502 VLP0147 0.7 (2.9)
7 A17 C3508 0.1 LB3503 VLP0147 0.7 (2.4)
8 GND
9 A15 C3509 0.1 LB3504 VLP0147 0.7 (2.4)
10 A16 0 (2.5)
11 0
12 NC 0
13 NC 0
14 NC 0
15 NC 0
16 NC 0
17 NC 0
18 NC 0
HA4 HA3 HA2 HA1
DET DET CMP
ZAP
CHROMA AMP
AT
VCC 36 5.0
NC 35 0
34 4.9
33 0.8 (3.4)
LP Ⓗ 32 0
31 1.4
30 2.4 (0)
GND 29
28 2.7 (1.9)
27 3.9 (2.2)
NC 26 0
REC Ⓗ 25 0 (4.9)
NC 24 0
CURR.EMPH 23 0
NC 22 0
NC 21 0
NC 20 0
NC 19 0
C3503 0.01
C3505 0.01
A3 A4 A5 A6

L3501 33u
C3501 6V47
C3502 0.01
TW3030
TW3001
C3510 0.1
R3506 360
R3501 100
C3511 0.1
R3503 390
R3504 300
QR3502 UN2212 (LP Ⓗ:ON)
B1 B2 B3

LB4908 0
C4946 2200P
QR4005 UN2113 (BUFFER)
-0.4 (-0.1)
R4022 560

R4011 470
C4010 0.027
QR4002 UN2211 (PAL EP Ⓗ:ON)
C4009 1

QR4003 UN2111 (D.A.REC Ⓗ:OFF)
0 (4.9)
5.0(-23.0)
5.0
R4009 2200
0.7 (-23.1)
Q4001 2SD601A (PB:ON)
0(3.6)
0 (-14.9)
R4010 2200
0.7 (-23.1)
Q4002 2SD601A (PB:ON)

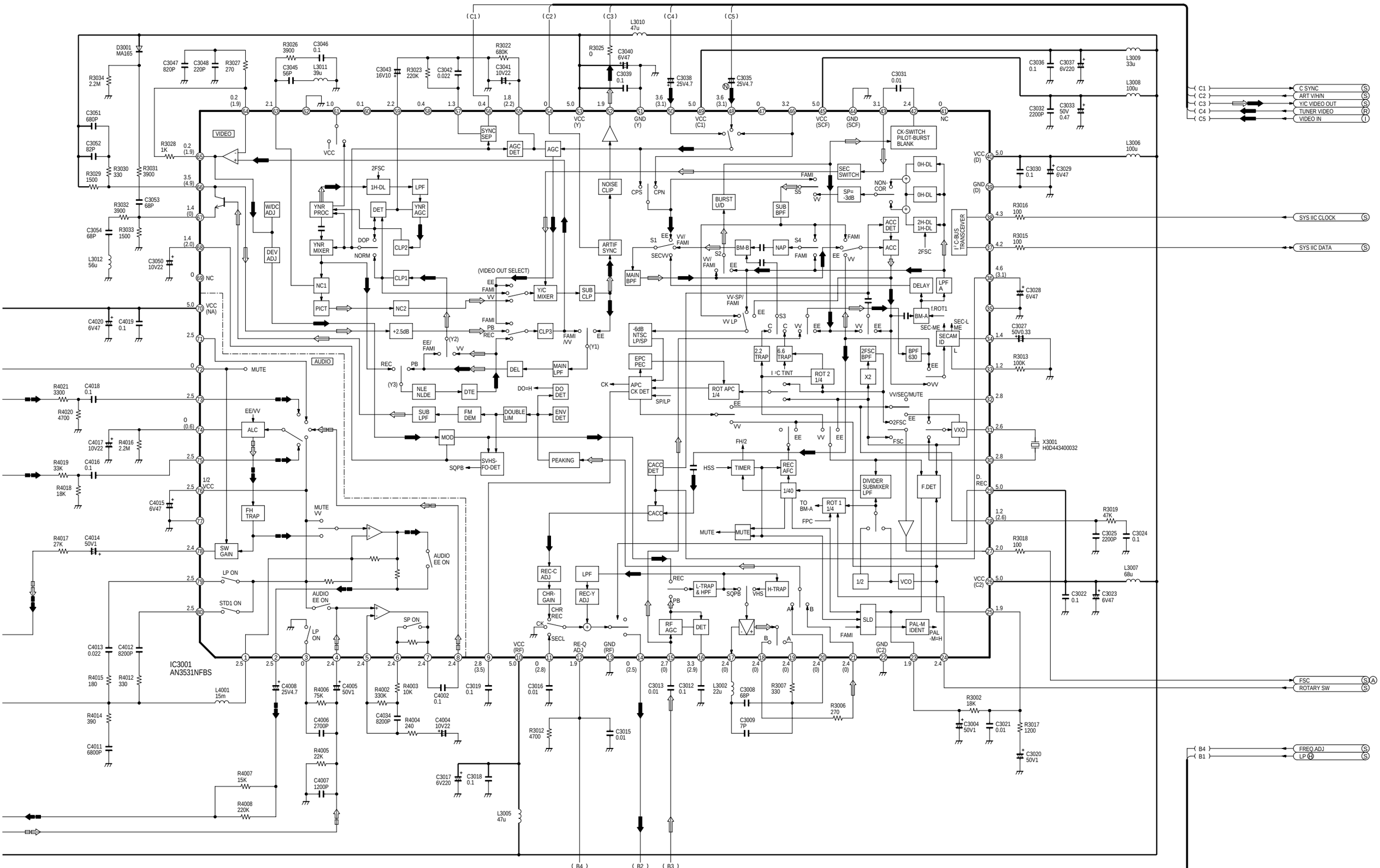
R4001 1K
QR4001 UN2212 (PAL EP Ⓗ:ON)
C4001 2200P

(A7) (A8) (A9) (A10) (A11)

NOTE:THE MEASUREMENT MODE OF THE DC VLOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBACK MODE WITH PAL COLOUR SIGNAL.(SP MODE)

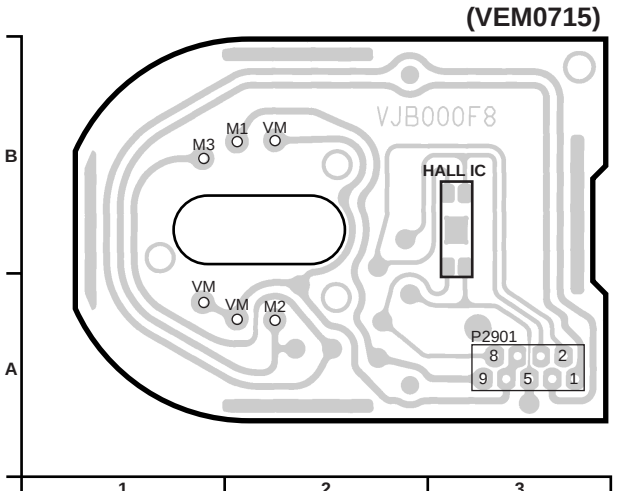
NV-FJ632EE
LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM



NV-FJ632EE
LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

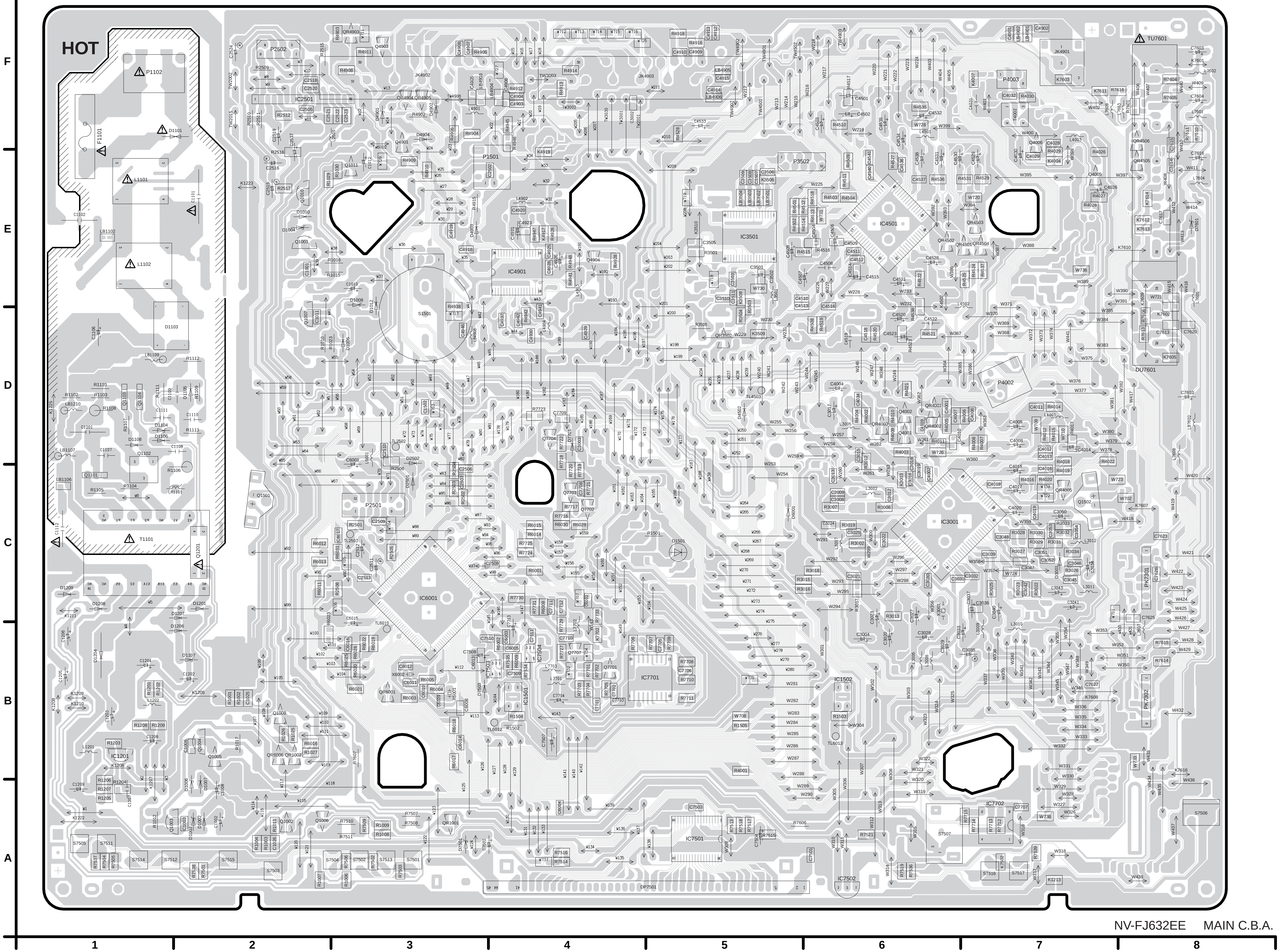


CYLINDER STATOR UNIT	
Integrated Circuit	
HALL IC	B-3
Connector	
P2901	A-3

ADDRESS INFORMATION

NV-FJ632EE
CYLINDER STATOR UNIT

(VEP06E55L)



NV-FJ632EE MAIN C.B.A.

IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY THE SAME TYPE.

CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

MAIN C.B.A.

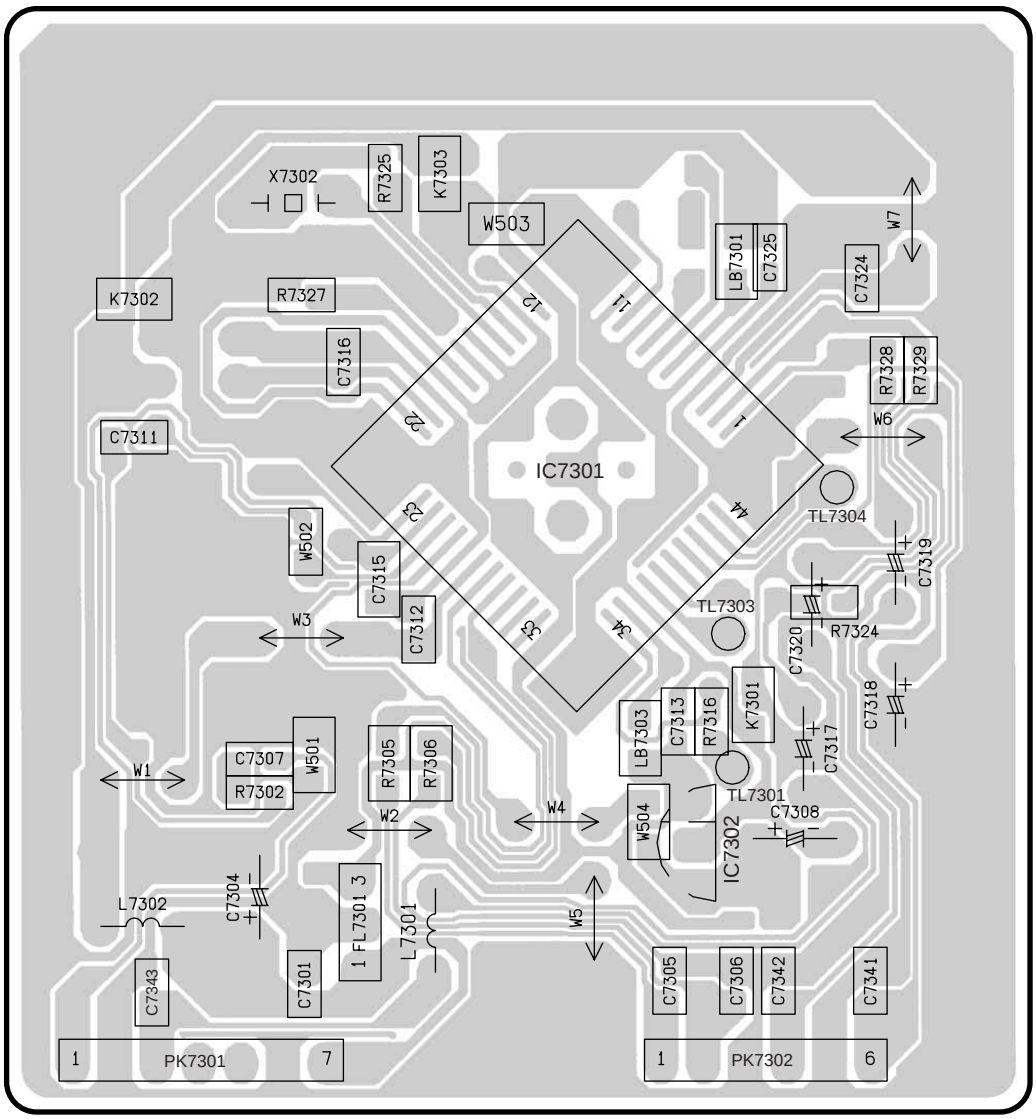
Transistor		**Integrated Circuit**	
Q1001	E-2	IC1201	B-1
Q1002	A-2	IC1501	B-4
Q1003	A-1	IC1502	B-6
Q1004	B-2	IC2501	F-2
Q1005	B-2	IC3001	C-6
Q1006	A-2	IC3501	E-5
Q1007	E-2	IC4501	E-6
Q1008	B-2	IC4901	E-4
Q1010	E-2	IC6001	C-3
Q1011	E-3	IC7501	A-5
Q1101	C-1	IC7502	A-6
Q1102	D-1	IC7503	B-4
Q1103	D-1	IC7504	B-4
Q1104	D-1	IC7701	B-5
Q1201	C-2	IC7702	A-7
Q1501	C-2	**Test Point**	
Q1502	C-7	TL2502	D-3
Q4001	D-6	TL2503	C-3
Q4002	D-6	TL4503	D-5
Q4005	E-7	TL6010	B-3
Q4006	F-7	TL6012	B-4
Q4901	F-3	TL6013	B-6
Q4903	F-3	TW2001	F-4
Q4904	E-4	TW2002	F-2
Q7701	B-4	TW2015	F-2
Q7702	C-4	TW3001	F-4
Q7703	C-4	TW3002	F-4
Q7704	D-4	TW3003	F-4
Q7707	B-4	TW3030	F-4
Transistor & Resistor		TW4501	F-5
QR1001	A-3	TW4502	F-5
QR1002	B-2	TW4901	F-5
QR3502	D-5	TW4902	F-5
QR4001	D-6	TW4903	F-6
QR4002	D-6	TW4906	F-3
QR4003	D-6	TW4907	F-5
QR4005	C-7	TW6002	F-3
QR4501	E-7	**Connector**	
QR4502	E-6	P1102	F-1
QR4503	E-7	P1501	E-4
QR4504	E-7	P2501	C-3
QR4505	E-8	P2502	F-2
QR4506	F-8	P3502	E-5
QR4903	F-3	P4002	D-7
QR4904	F-3	P4003	F-7
QR4905	F-3	DU7601	D-8
QR6001	B-3	PK7301	C-8
QR6006	B-2	PK7302	B-8
		TU7601	F-8

ADDRESS INFORMATION

NICAM DECODER PACK C.B.A.	
Integrated Circuit	
IC7301	B-2
IC7302	A-2
Test Point	
TL7301	A-2
TL7303	B-2
TL7304	B-2
Integrated Circuit	
PK7301	A-1
PK7302	A-2

ADDRESS INFORMATION

(VEP07A18T)

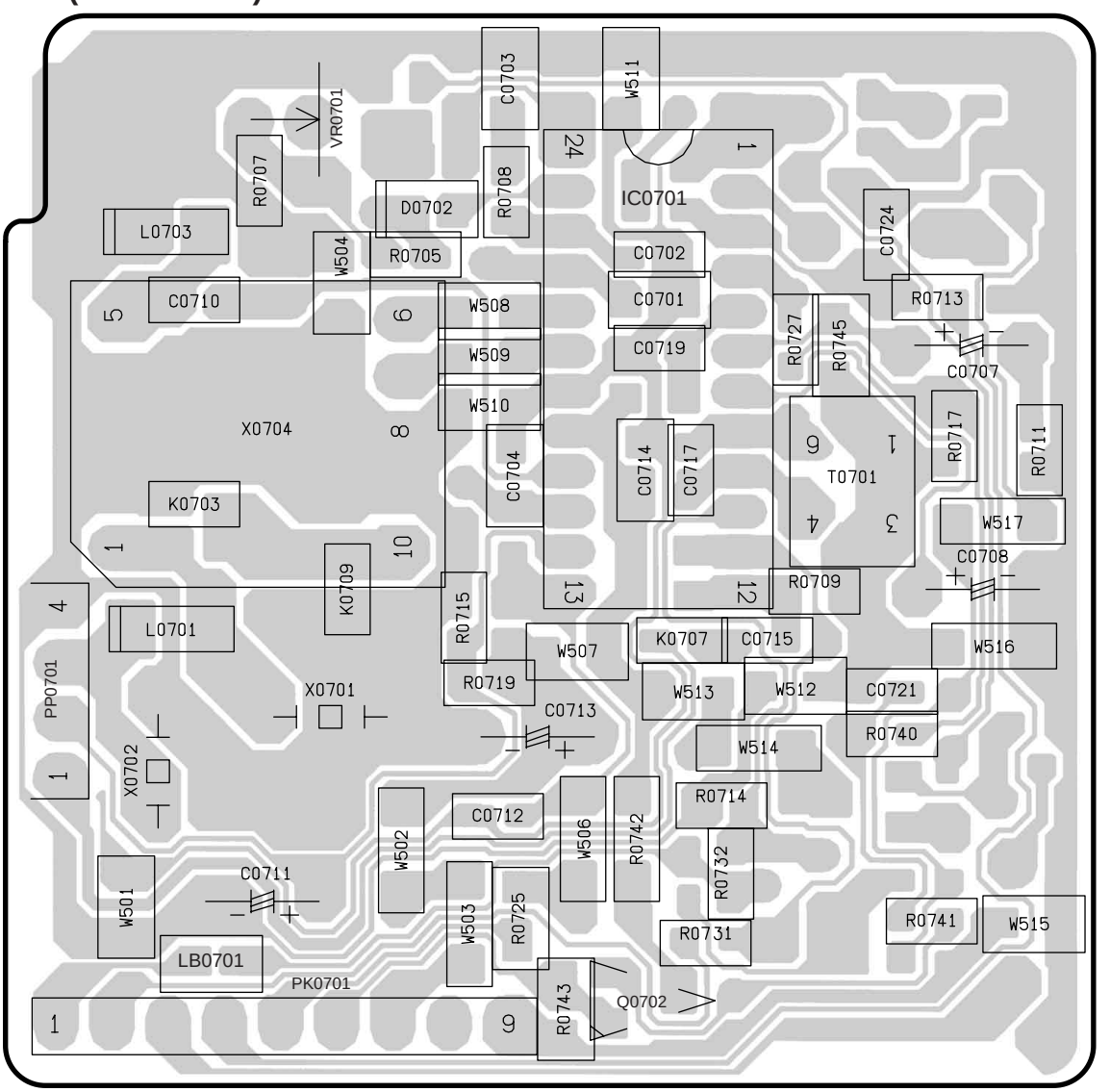


NV-FJ632EE
NICAM DECODER PACK C.B.A.

TV DEMODULATOR PACK C.B.A.	
Transistor	
Q0702	A-3
Integrated Circuit	
IC0701	C-2
Adjustment	
T0701	B-3
VR0701	D-2
Connector	
PK0701	A-2
PP0701	B-1

ADDRESS INFORMATION

(VEP07A23U)



NV-FJ632EE
TV DEMODURATOR PACK C.B.A.

T1101-3 STOP
4.0Vp-p (2msec.div.)

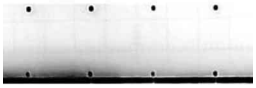
T1101-5 STOP
500Vp-p (5usec.div.)

T1101-6 STOP
530Vp-p (5usec.div.)

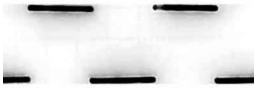
T1101-7 STOP
30Vp-p (5usec.div.)

Q1102-G STOP
15Vp-p (5usec.div.)

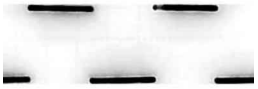
Q1201-1,2 STOP
0.5Vp-p (5usec.div.)



IC6001-20 PAUSE
5.0Vp-p (10msec.div.)

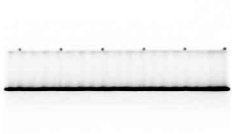


IC6001-21 REC
5.0Vp-p (10msec.div.)



IC6001-24 REC
5.0Vp-p (10msec.div.)

IC6001-61 REC
2.4Vp-p (20µsec.div.)

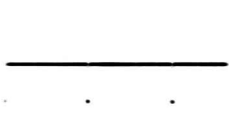


IC6001-68 REC
5.0Vp-p (10msec.div.)

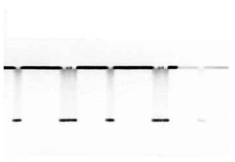
IC6001-89 REC
5.0Vp-p (10msec.div.)

IC6001-90,91 REC
5.0Vp-p (10msec.div.)

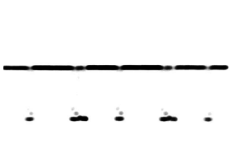
IC6001-93,94 FF/REW
5.0Vp-p (1msec.div.)



IC6001-97,98 REC
5.0Vp-p (10msec.div.)

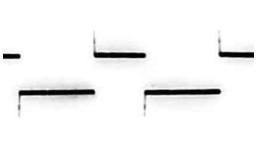


IC6001-99 REC
5.0Vp-p (10msec.div.)

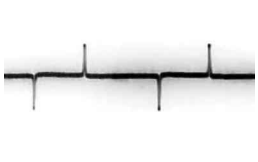


IC6001-100 REC
5.0Vp-p (10msec.div.)

IC6001-107 REC
5.0Vp-p (10msec.div.)

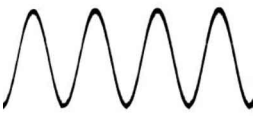


IC6001-111,112 REC
6.0Vp-p (10msec.div.)



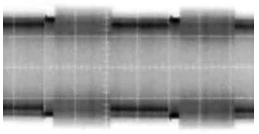
IC6001-114 PLAY
4.2Vp-p (10msec.div.)

IC2501-1,2,16 REC
8.6Vp-p (5msec.div.)



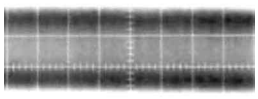
IC3001-2 REC
1.2Vp-p (5msec.div.)

IC3001-4 PLAY
5.0Vp-p (5msec.div.)



IC3001-14 REC
0.4Vp-p (5msec.div.)

IC3001-15 PLAY
0.5Vp-p (20µsec.div.)



IC3001-20 PLAY
150mVp-p (20µsec. div.)

IC3001-24 REC/PLAY
5.0Vp-p (10msec. div.)

IC3001-37 REC/PLAY
5.0Vp-p (5msec. div.)

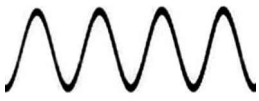
IC3001-38 REC/PLAY
5.0Vp-p (5msec. div.)

IC3001-42,43 PLAY
0.4Vp-p (20µsec. div.)

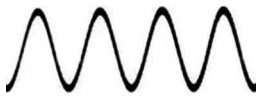
IC3001-48,50 REC
1.0Vp-p (20µsec. div.)

IC3001-52 REC/PLAY
2.0Vp-p (20µsec. div.)

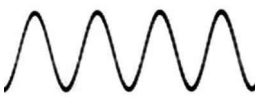
IC3001-78 REC/PLAY
1.2Vp-p (5msec. div.)



IC4501-9,14 REC
1.2Vp-p (5msec. div.)

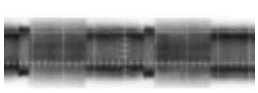


IC4501-21 REC
1.2Vp-p (5msec. div.)

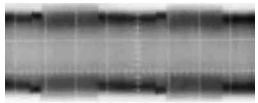


IC4501-53,57
REC/PLAY
1.2Vp-p (5msec. div.)

IC3501-1 REC/PLAY
5.0Vp-p (10msec. div.)



IC3501-30 PLAY
0.4Vp-p (5msec. div.)



IC3501-31 REC
0.3Vp-p (5msec. div.)

SYSTEM CONTROL & SERVO ICs DC VOLTAGE CHART (SP MODE)

Ref. No.	IC1501								IC1502											
MODE	1	2	3	4					1	2	3	4								
STOP	1.2	2.3	4.9	0.0					0.0	1.2	4.9	0.0								
PLAY	1.2	2.3	4.2	0.0					0.0	1.2	4.9	0.0								
REC	1.2	2.3	4.8	0.0					0.0	1.2	4.8	0.0								
F.F	1.2	2.3	2.2	0.0					0.0	1.2	2.4	0.0								
REW	1.2	2.3	2.4	0.0					0.0	1.2	2.3	0.0								

Ref. No.	IC2501																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
STOP	16.8	16.8	16.8	4.9	4.9	1.2	1.1	0.0	2.7	1.5	0.0	4.1	4.1	3.7	0.0	16.8				
PLAY	14.9	14.9	15.2	1.1	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	14.9				
REC	15.1	15.1	15.4	1.0	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	15.1				
F.F	14.4	14.4	14.6	1.0	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	14.7				
REW	14.3	14.3	14.6	1.1	4.9	1.1	1.2	0.6	2.4	1.5	0.0	3.8	3.8	3.8	0.0	14.9				

Ref. No.	IC6001																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.0	1.9	0.0	0.0	3.5	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.9	4.7	4.1	0.0	4.9	0.0	0.0	0.0
PLAY	4.7	1.8	0.0	0.0	3.9	0.0	0.0	0.0	2.4	0.0	4.3	4.9	4.9	4.6	0.1	0.0	0.0	0.0	0.0	0.0
REC	4.7	1.9	0.0	0.0	2.2	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.8	4.6	4.0	0.0	0.0	0.0	4.9	0.0
F.F	4.9	1.8	0.0	0.0	3.5	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.8	4.8	4.1	0.0	4.9	0.0	0.0	0.0
REW	4.9	1.8	0.0	0.0	3.4	0.0	0.0	0.0	2.4	0.0	0.0	4.9	4.9	4.6	4.1	0.0	4.9	0.0	0.0	0.0

Ref. No.	IC6001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
STOP	0.0	0.0	2.5	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	0.0	0.0	4.9
PLAY	2.4	0.0	4.9	2.4	2.4	4.8	0.0	0.0	0.0	0.0	-	-	4.9	0.0	1.5	3.0	4.9	0.0	0.0	4.9
REC	2.4	0.0	4.8	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	4.9	4.9	0.0
F.F	0.0	0.0	0.0	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	0.0	0.0	4.9
REW	0.0	0.0	0.0	2.4	0.0	4.8	0.0	4.9	0.0	0.0	-	-	4.9	0.0	1.5	3.0	0.0	0.0	0.0	4.9

Ref. No.	IC6001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0.0	0.0	5.0	4.9	0.0	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.4	4.9	0.0
PLAY	0.0	0.0	5.0	4.9	0.0	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.4	4.9	0.0
REC	0.0	4.9	5.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	4.9	4.9	1.5	2.1	4.8	1.9	0.0	2.4	4.9	0.0
F.F	0.0	0.0	5.0	4.9	4.9	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.5	4.9	0.0
REW	0.0	0.0	5.0	4.9	4.9	0.0	0.0	0.0	4.9	0.0	4.9	4.9	1.5	2.1	4.9	1.9	0.0	2.4	4.9	0.0

Ref. No.	IC6001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
STOP	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	4.9	4.9	0.0	0.0	0.0	5.2	5.2	0.0	0.0	2.7
PLAY	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.4	2.4
REC	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.4	2.4
F.F	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	1.6	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.9	2.4
REW	1.9	2.1	0.0	0.0	0.0	0.0	0.0	0.4	1.6	0.0	4.9	4.8	0.0	0.0	0.0	5.2	5.2	0.0	2.9	2.4

Ref. No.	IC6001																			
MODE	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
STOP	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	4.9	4.9	4.9	4.9	4.8	4.8	4.1	4.1
PLAY	0.0	0.4	0.0	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	4.1	4.8	4.9	4.9	4.8	4.8	4.2	4.1
REC	0.0	0.4	0.0	0.0	4.5	0.0	0.0	0.0	4.9	4.9	4.9	2.4	4.2	4.8	4.9	4.9	4.8	4.8	4.1	4.0
F.F	0.0	4.8	0.0	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	2.3	2.3	4.9	4.9	4.8	4.8	4.2	4.1
REW	0.0	4.8	4.9	0.0	0.3	0.0	0.0	0.0	4.9	4.9	4.9	2.4	2.2	2.3	4.9	4.9	4.8	4.8	4.2	4.1

Ref. No.	IC6001																			
MODE	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116				
STOP	0.0	0.0	2.5	2.5	0.0	0.0	4.9	2.5	2.5	0.0	2.5	2.5	2.5	2.5	4.9	4.9				
PLAY	0.0	0.0	2.5	2.5	0.0	0.0	1.1	2.5	2.5	0.0	2.5	2.5	2.5	2.5	4.9	4.9				
REC	0.0	0.0	2.4	2.4	0.0	0.0	1.0	2.4	2.4	0.0	1.9	2.3	2.5	2.5	4.9	4.9				
F.F	0.0	0.0	2.5	2.5	0.0	0.0	1.0	2.5	2.5	0.0	2.5	2.5	2.5	2.5	5.0	5.0				
REW	0.0	0.0	2.5	2.5	0.0	0.0	1.1	2.5	2.5	0.0	2.5	2.5	2.5	2.5	5.0	5.0				

Ref. No.	IC7701																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
STOP	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.5	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
PLAY	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	3.0	0.0	3.1	0.0	3.5	3.1	1.5	1.3	0.0	4.9	4.9
REC	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.4	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
F.F	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.5	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9
REW	0.0	0.0	0.0	4.8	4.8	0.0	0.4	0.0	4.9	2.5	0.0	2.5	0.0	2.5	2.5	1.5	1.3	0.0	4.9	4.9

Ref. No.	IC7702																			
MODE	1	2	3	4	5	6	7	8												
STOP	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
PLAY	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
REC	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
F.F	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												
REW	0.0	0.0	0.0	0.0	4.8	4.8	4.9	4.9												

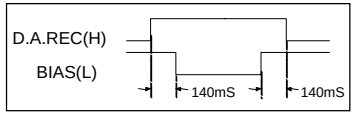
SYSTEM CONTROL & SERVO TRs DC VOLTAGE CHART (SP MODE)

Ref. No.	Q1501			Q1502			Q7701			Q7702			Q7703		
MODE	+	−		+	−		E	C	B	E	C	B	E	C	B
STOP	4.7	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.6
PLAY	4.7	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.6
REC	4.6	0.0		4.8	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.5
F.F	4.7	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.5
REW	4.9	0.0		4.9	0.0		1.6	0.0	0.9	0.0	4.9	0.0	0.0	0.0	0.5

Ref. No.	Q7704		
MODE	E	C	B
STOP	0.0	4.2	0.0
PLAY	0.0	4.2	0.0
REC	0.0	4.2	0.0
F.F	0.0	4.2	0.0
REW	0.0	4.2	0.0

Ref. No.	QR6001			QR6006		
MODE	E	C	B	E	C	B
STOP	0.0	0.0	4.9	0.0	0.0	4.9
PLAY	0.0	12.3	0.0	0.0	0.0	4.8
REC	0.0	0.0	4.9	0.0	0.0	4.8
F.F	0.0	0.0	4.9	0.0	0.0	4.8
REW	0.0	0.0	4.9	0.0	0.0	4.8

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
1	CURRENT_LIMIT	O	Capstan motor current limit terminal.	Low	Low	Low	Low
2	F ADJUST	O	Analogue voltage output for HEAD frequency response adjustment	Low	Low	Low	Low
3	N.C.	--	Low fix (No Connection.)	Low	Low	Low	Low
4	C EMPHA(H)	O	Terminal of the Current emphasis video/FM audio recording current. [HIFI/2HEAD]:Fix to Low (Normal mode) [4HEAD] :Fix to Low (factory mode) Fix to High (Insert/AV Insert mode) Others (Depend on tape speed)	Low	Low	Low	Low
5	TRACKING_ENVE	O	Playback envelope input for auto tracking adjustment and cvc.	In	In	In	In
6	SLP(H)	O	Tape running speed output terminal.(Output signal depens on tape speed) [High]……During NTSC_10H or PAL_9H mode [Low]……Except NTSC_10H or PAL_9H mode	Low	Low	Low	Low
7	LP(H)	O	Tape running speed output terminal.(Output signal depens on tape speed) [High]……During NTSC_4H/6H or PAL_6H/9H mode [Low]……Except NTSC_4H/6H or PAL_6H/9H mode 2HEAD model: Low Fix	Low	Low	Low	Low
8	CPB	I	Input terminal for "PB (H)" from AV2. [High]…….3.85V - 5.0V [Midd]…….1.82V - 2.84V [Low]……. 0V - 0.81V	In	In	In	In
9	AFC S	I	"S-curve" Input terminal from tuner.	In	In	In	In
10	A-MUTE(H)	O	Audio mute output terminal for RF Converter.	High	High	Low	High
11	AV1_8IN	I	Input terminal for "PB (H)" from AV1. [High]…….3.85V - 5.0V [Midd]…….1.82V - 2.84V [Low]……. 0V - 0.81V	In	In	In	In
12	N/S/T2/T3	I	Mode select terminal [NORMAL mode]: More than 4.0V [SERVICE mode]: 2.5V - 4.0V [TEST_2 mode]: 1.0V - 2.5V [TEST_3 mode]: 0V - 1.0V	In	In	In	In
13	S-PHOTO	I	Tape end sensor input terminal.(Photo sensor input from supply side) [Black Tape]: more than 2.6V [Lead Tape]: Less than 2.4V	In	In	In	In
14	T-PHOTO	I	Tape beginning sensor input terminal.(Photo sensor input from take-up side) [Black Tape]: more than 2.6V [Lead Tape]: Less than 2.4V	In	In	In	In
15	ABS_NORM(H)	I	(Input terminal for FM audio enverope output level detection)	In	In	In	In
16	N.C	--	Low fix (No Connection.)	Low	Low	Low	Low
17	PLAY_REC(L)	O	Output terminal for switching the capstan voltage. [Other than PLAY/REC mode]……Always "High". [JOG/Shuttle mode in PLAY mode]……Always "High". After 5 seconds from PLAY/REC mode completion, it changes to "Low". During "Low" outputs, it checks every main capstan FG, when the no FG is inputted in a rotation, it changes to "High" and it keeps "high" by cassette ejection.	Low	Low	Low	Low
18	VSYNC(L)	O	Output terminal for V_sync detection result. [Vsync exist] : "Low" [Vsync not exist: "High"	Low	Low	Low	Low
19	D.FM.REC(H)	O	Timing output terminal for FM_Audio recording current.	Low	Low	Low	Low
20	ART.V/H/N	O	Output terminal for Artificial V synchronization signal.	Low	Low	Low	Low

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
21	ROTARY.SW	O	Output terminal for rotary switch.	Low	Low	Low	Low
22	H.A.SW	O	Output terminal for HEAD AMP switch.	Low	Low	Low	Low
23	ENVE.SELECT	I	Input terminal for enverope selection.	Low	Low	Low	Low
24	VIDEO.H.SW	O	Output terminal for video HEAD switch.	Low	Low	Low	Low
25	A.H.SW	O	Output terminal for FM audio HEAD switch.	Low	Low	Low	Low
26	A.DEF(H)	O	Audio Mute output terminal for tuner and decoder. [High].....During VCR mode is NORMAL PLAY and VV mode.	Low	Low	Low	Low
27	PROG.ON(H)	O	I/O control to switch IIC bus for LW-programmer. H:IIC bus is connected to AV2. L:IIC bus is not connected to AV2.	Low	Low	Low	Low
28	AVPB-H(L)	O	"PB-(H)"output terminal for AV2 *Details, refer to 21pin control specifications. *The signal output from Pin-8 of 21pin terminal is shown below. pin8 \ Name: AVPB-H(L) / AVPBM-(H) High: L / Hi-Z Middle: H / Hi-Z Low: H / L	High	High	Low	High
29	AVPB-M(H)	O		Low	Low	Low	Low
30	GND(D)	--	GND	---	---	---	---
31	20MHz.IN	I	Main oscillator input	---	STOP	STOP	---
32	20MHz.OUT	O	Main oscillator output	---	STOP	STOP	---
33	+5V(D)	I	5V input terminal	---	---	---	---
34	32KHz IN	I	Sub oscillator input	---	---	---	---
35	32KHz OUT	O	Sub oscillator output	---	---	---	---
36	NC(VCONT)	I	Video Control	---	---	---	---
37	V EE(L)	O	Output terminal for switch between EE and VV.	Low	Low	Low	Low
38	D REC(H)	O	Output terminal for video recording current control.	Low	Low	Low	Low
39	D.A.REC(H)	O	Control terminal for normal audio recording current.	Low	Low	Low	Low
40	BIAS(L)	O	Bias oscillation Control terminal for Linear audio recording current. 	High	Hi-Z	Hi-Z	High
41	FM.MUTE(H)	O	Output terminal for audio mute control.	High	High	Low	High
42	FULL ERASE(L)	O	Output terminal for control FULL ERASE HEAD.	Low	Low	Low	Low
43	POWER_KEY	I	Input terminal for the unit power button. It switches ON to OFF and/or OFF to ON when down edge is detected.	In	In	In	In
44	POS.SW3	I	Input terminal for mecha position.	In	In	In	In
45	POS.SW2	I	Input terminal for mecha position.	In	In	In	In
46	POS.SW1	I	Input terminal for mecha position.	In	In	In	In
47	POWER OFF(H)	O	ON/OFF Control terminal for power circuit. Power off condition: "High" is existed. ("Low" is existed when the mechanism and/or circuit operation is activated.)	High	High	Low	High
48	FIP(L)	O	Output terminal for FIP on/off control signal. ("Low" is existed when the power off condition under the "FIP OFF" setting.)	Not fix	High	Low	Low
49	P50 IN	I	Input terminal for Project 50 serial signal.	In	In	In	In
50	LC.OSC IN	I	The oscillation input terminal for OSD dot clock.	---	---	---	---

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
51	LC.OSC OUT	O	The oscillation output terminal for OSD dot clock.	---	---	---	---
52	RESET(L)	I	Input terminal for microprocessor reset.	In	In	In	In
53	4FC.LPF	I	4fc clock input terminal	---	---	---	---
54	OSD.FSC IN	I	OSD clock input terminal	---	---	---	---
55	5V(OSD)	I	5V input terminal	---	---	---	---
56	CVIN	I	Input terminal for Composite video signal.	---	---	---	---
57	GND(OSD)	I	GND	---	---	---	---
58	LECHA	I	Input terminal for Composite video signal.(White level)	---	---	---	---
59	20M.START(H)	I	Switching terminal for stertting Mode.(High speed/Low speed)	---	---	---	---
60	MD0	I	Mode setting terminal for flash over-write.	---	---	---	---
61	CVOUT	O	Output terminal for CG Video.	---	---	---	---
62	HLF	O	LPF connecting terminal for the slicer. (For OSD dot clock.)	---	---	---	---
63	SECAM.V.IN	I	Chrominance input terminal for SECAM super impose.	---	---	---	---
64	GND	I	Connect to GND	In	In	In	In
65	S TAB(L)	I	Input terminal for the prevention tab. [EXIST] :LOW [NO EXIST] :HIGH	In	In	In	In
66	UNLOADING(H)	O	Control terminal for loading motor. [Reverse rotation / brake] : "High"	Low	Low	Low	Low
67	LOADING(H)	O	Control terminal for loading motor. [forward rotation / brake] : "High"	Low	Low	Low	Low
68	C.SYNC	I	Input terminal for composite V-sync signal.	In	In	In	In
69	EX.FF/REW(L)	I	Filter control terminal for PB-CTL signal in FF/REW.	Low	Low	Low	Low
70	PAL-I/BG/DK(SYS4)	O	Output terminal for TV broadcast system switching signal for video circuit control.	Not fix	Low	Low	Low
71	SECAM/PAL(SYS2)	O	Output terminal for TV broadcast system switching signal for video circuit control.	Not fix	Low	Low	Low
72	SLEEP(L)	O	Output terminal for super power save mode setting. P-OFF in the super power save mode……. "Low".	High	Low	Low	High
73	PB60Hz(H)	O	Switching terminal for NTSC FM Audio trap filter in PB. [VV (PB,Trick_PB/A-DUB, A-DUB-PS) mode and CTL is 60Hz] : "High" [Other than above condition] : "Low"	Low	Low	Low	Low
74	ADUB(H)	O	Switching terminal for Bias oscillation noise filter in A-DUB mode. [ADUB/ADUB-PS(Including Assemble/syncro/AV-Insert)] : "High" [Other than above condition] : "Hi-Z"	Hi-Z	Hi-Z	Hi-Z	Hi-Z
75	N.C(VBI1)	O	Fix to Low.	Low	Low	Low	Low
76	P FAIL	I	Input terminal for Interrupt signal for power fail detection.	In	In	In	In
77	IR	I	Input terminal for Interrupt signal from IR sensor emitted by Remo-Con.	In	In	In	In
78	P50 OUT	O	Output terminal for Project 50 serial data.	Not fix	Low	Low	Low
79	CAP.ET	O	Output terminal for Capstan Torque command.	0V	0V	Low	0V
80	CYL.ET	O	Output terminal for Cylinder Torque command.	4.213V	4.213V	Low	4.213V
81	DIGI.LINK	O	Control signal for switching IR sensor.[only LOEWE model]	Low	Low	Low	Low
82	HALF_WAVE(H)	O	Switching terminal for capstan driver speed mode.(FAST/SLOW)	In	In	In	In
83	CAP.R/F	O	Switching terminal for capstan motor rotating direction.	Low	Low	Low	Low
84	125Hz	O	125Hz pulse output terminal for clock adjustment.	Not fix	Low	Low	Low
85	SHORT_DN	I	Short Circuit detection terminal for oscillation circuit in REC. *When the "BIAS(H)" is "Low" and this terminal is "High", "F08" is displayed. *When the "BIAS(H)" is "High" and this terminal is "low", "F07" is displayed.	In	In	In	In
86	N.C	--	Fix to Low.	Low	Low	Low	Low
87	N.C	--	Fix to Low.	Low	Low	Low	Low
88	N.C	--	Fix to Low.	Low	Low	Low	Low
89	FLD/T2 CLK	O	Serial clock output terminal for FIP driver and TEST_2(Factory use).	Not fix	Low	Low	Low
90	FLD/T2 DATA IN	I	Serial data input terminal for FIP driver and TEST_2(Factory use).	Not fix	In	In	In

No.	Port Name	I/O	Description	P-OFF	P-Save	P-FAIL	Reset
91	FLD/T2 DATA OUT	O	Serial data output terminal for FIP driver and TEST_2(Factory use).	Not fix	Low	Low	Low
92	FLD_CS	O	Chip select terminal for FIP driver.	Not fix	Low	Low	Low
93	T.REEL.PULSE	I	Input terminal for Take-up Reel sensor pulse.	In	In	In	In
94	S.REEL.PULSE	I	Input terminal for Supply Reel sensor pulse.	In	In	In	In
95	DAVN	I	DAVN signal from Slicer	In	In	In	In
96	EEP_WR	O	Write enable for EEPROM H:READ only L:Write	High	High	Low	High
97	OSD IIC CLK	O	IIC clock for EEPROM,I/O and slicer	Not fix	Low	Low	Low
98	OSD IIC DATA	I/O	IIC data for EEPROM,I/O and slicer	Not fix	Low	Low	Low
99	MAIN IIC CLK	O	IIC clock for AV1CHIP,FM audio,Tuner,Decoder and RFC	Not fix	Low	Low	Low
100	MAIN IIC DATA	I/O	IIC data for AV1CHIP,FM audio,Tuner,Decoder and RFC	Not fix	Low	Low	Low
101	N.C	--	Low fix terminal.	Low	Low	Low	Low
102	N.C	--	Low fix terminal.	Low	Low	Low	Low
103	FG.AMP.OUT	O	Output from internal FG Amplifier	---	---	---	---
104	FG.AMP.IN	I	Input for internal FG Amplifier	---	---	---	---
105	GND(A)	I	GND	---	---	---	---
106	GND	I	GND	---	---	---	---
107	PFG	I	Cylinder PG/FG input terminal	---	---	---	---
108	OREF	O	Output from internal reference voltage (2.5V)	---	---	---	---
109	IREF	I	Input for internal reference voltage	---	---	---	---
110	to GND	--	Connect to GND	---	---	---	---
111	CTL.HEAD(-)	I	Input signal from CTL HEAD(+)	---	---	---	---
112	CTL.HEAD(+)	I	Input signal from CTL HEAD(-)	---	---	---	---
113	CTL.AMP.REF	I	Input for internal CTL amplifier reference voltage	---	---	---	---
114	PB.CTL.OUT	O	Output from internal CTL amplifier	---	---	---	---
115	+5V(A)	I	5V input terminal	---	---	---	---
116	+5V(AD)	I	5V input terminal	---	---	---	---

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
OFF	---	---	---	---	---	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
VPS STAND BY or Personal Planner Standby	EXT or TIMER1 or TIMER2	---	---	L	NO.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					C+.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.NO	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.C+	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	*[M/H]	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				H	NO.TU	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					C+.TU	L	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					AV1	L	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
					AV2	L	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					SAT.C+	L	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	H	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
	DECODER	---	---	L	NO.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					C+.TU	L	AV2 In	AV1 In	L	L	OFF	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV1	L	AV2 In	AV1 In	L	L	OFF	AV1	AV1	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV2	L	AV2 In	AV1 In	L	L	OFF	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					AV3	L	AV2 In	AV1 In	L	L	OFF	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.NO	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
					SAT.C+	L	AV2 In	AV1 In	L	L	OFF	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	Mute	AV2 In	AV1 In
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					C+.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	Mute	Mute	Mute	TUN	AV1 In
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	Mute	Mute	Mute	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	Mute	Mute	Mute	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	Mute	Mute	Mute	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
					SAT.C+	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	Mute	Mute	Mute	SAT	AV1 In

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
P.ON	EXT	TV	EE	L	NO.TU	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
	or				AV1	---	VCR out	VCR out	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	---	VCR out	VCR out	L	L	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
	TIMER1				AV3	---	VCR out	VCR out	L	L	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
	or				SAT.C+	---	VCR out	VCR out	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
				H	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
	TIMER2				C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	---	VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
					AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
		VTR	EE	L	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	L	VCR out	VCR out	H	H	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
						M/H	VCR out	VCR out	M/H	M/H	ON	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
					AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
				H	NO.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
					C+.TU	---	VCR out	VCR out	H	H	OFF	TUN	TUN	TUN	TUN	TUN	TUN	INSEL
P.ON	EXT	VTR	EE	H	AV1	---	VCR out	VCR out	H	H	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	INSEL
					AV2	---	VCR out	VCR out	H	H	OFF	AV2	AV2	AV2 In	AV2 In	AV2 In	AV2 In	INSEL
					AV3	---	VCR out	VCR out	H	H	OFF	AV3	AV3	AV3 In	AV3 In	AV3 In	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	H	H	OFF	SAT	SAT	SAT	SAT	SAT	SAT	INSEL
			VV	---	NO.TU	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	TUN	INSEL
					C+.TU	---	VCR out	VCR out	M/H	M/H	OFF	TUN	PB	PB	PB	PB	TUN	INSEL
					AV1	---	VCR out	VCR out	M/H	M/H	OFF	AV1	PB	PB	PB	PB	AV1 In	INSEL
					AV2	---	VCR out	VCR out	M/H	M/H	OFF	AV2	PB	PB	PB	PB	AV2 In	INSEL
					AV3	---	VCR out	VCR out	M/H	M/H	OFF	AV3	PB	PB	PB	PB	AV3 In	INSEL
					SAT.NO	---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	SAT	INSEL
					SAT.C+	---	VCR out	VCR out	M/H	M/H	OFF	SAT	PB	PB	PB	PB	SAT	INSEL
	DECODER	TV	EE	L	NO.TU	L	VCR out	AV1 In	L	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	TUN	TUN	AV2 In	AV1 In	TUN	AV2 In	AV1 In
					C+.TU	L	VCR out	TUN IN	L	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	L	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	L	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	L	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	L	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	AV3	AV3	AV2 In	AV1 In	AV3 In	AV2 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	L	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	AV2 In	AV1 In	M/H	L	ON	SAT	SAT	AV2 In	AV1 In	SAT	AV2 In	AV1 In
					SAT.C+	L	VCR out	SAT IN	L	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	TUN
						M/H	VCR out	SAT IN	L	L	OFF	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	TUN
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT

INPUT CONDITION							VIDEO OUTPUT RESULT							AUDIO OUTPUT RESULT				
POWER	AV2 SELECT	TV/ VTR	EE/ VV	OSD ON(H)	INPUT CH	AV2 PB(H)	AV1 OUT	AV2 OUT	AV1 PB(H)	AV2 PB(H)	RGB SW	VCR IN	VCR OUT	AV1 Out	AV2 Out	RF (C)	AV1 Out Selector	AV2 Out Selector
P.ON	DECODER	VTR	EE	L	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	M/H	L	ON	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	ON	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	M/H	L	ON	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
				H	NO.TU	L	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	TUN	TUN	TUN	AV1 In	TUN	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	H	L	OFF	TUN	TUN	TUN	TUN	TUN	TUN	TUN
						M/H	VCR out	TUN IN	H	L	OFF	AV2	AV2	AV2 In	TUN	AV2 In	AV2 In	TUN
					AV1	L	VCR out	AV1 In	H	L	OFF	AV1	AV1	AV1 In	AV1 In	AV1 In	AV1 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV2	AV2	AV2 In	AV1 In	AV2 In	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	AV3	AV3	AV3 In	AV1 In	AV3 In	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
						M/H	VCR out	AV1 In	H	L	OFF	SAT	SAT	SAT	AV1 In	SAT	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	H	L	OFF	SAT	SAT	SAT	SAT	SAT	SAT	SAT
						M/H	VCR out	SAT IN	H	L	OFF	AV2	AV2	AV2 In	SAT	AV2 In	AV2 In	SAT
			VV	---	NO.TU	L	VCR out	AV1 In	M/H	L	OFF	TUN	PB	PB	AV1 In	PB	TUN	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	TUN	PB	PB	AV1 In	PB	TUN	AV1 In
					C+.TU	L	VCR out	TUN IN	M/H	L	OFF	TUN	PB	PB	TUN	PB	TUN	TUN
						M/H	VCR out	TUN IN	M/H	L	OFF	AV2	PB	PB	TUN	PB	AV2 In	TUN
					AV1	L	VCR out	AV1 In	M/H	L	OFF	AV1	PB	PB	AV1 In	PB	AV1 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					AV2	L	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV2	PB	PB	AV1 In	PB	AV2 In	AV1 In
					AV3	L	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	AV3	PB	PB	AV1 In	PB	AV3 In	AV1 In
					SAT.NO	L	VCR out	AV1 In	M/H	L	OFF	SAT	PB	PB	AV1 In	PB	SAT	AV1 In
						M/H	VCR out	AV1 In	M/H	L	OFF	SAT	PB	PB	AV1 In	PB	SAT	AV1 In
					SAT.C+	L	VCR out	SAT IN	M/H	L	OFF	SAT	PB	PB	SAT	PB	SAT	SAT
						M/H	VCR out	SAT IN	M/H	L	OFF	AV2	PB	PB	SAT	PB	AV2 In	SAT

NOTE: NO.TU: Tuner position, DECODER OFF (e.g. ARD) RGB SW : OFF = HIGH, ON=LOW

C+TU: Tuner position, DECODER ON (e.g. PREMI) EE : Non-Playback signal VV:Playback signal

***[M/H] :In case of Personal Planner standby(not External Link), AV1 PB must not output 'M' or 'H'**

443NT [L]	4.43 NTSC Ⓛ
A. COMP	AUDIO COMPONENT SIGNAL
A. COMPO	AUDIO COMPONENT SIGNAL
A. D.P [L]	AUDIO DUBBING PAUSE Ⓛ
A. D/L [L]	AUDIO DUBBING PAUSE Ⓛ
A. DEF [S]	AUDIO DEFEAT
A. DEF [S] [L]	AUDIO DEFEAT
A. DUB P [L]	AUDIO DUBBING PAUSE Ⓛ
A. DUB [H]	AUDIO DUBBING Ⓗ
A. ERASE	AUDIO ERASE
A. H. SW	AUDIO HEAD SWITCHING PULSE
A. HEAD [R]	AUDIO HEAD (REC)
A. HEAD [W]	AUDIO HEAD (PLAY)
A. IN [L]	AUDIO INPUT (L)
A. IN [R]	AUDIO INPUT (R)
A. MUT [H]	AUDIO MUTE Ⓗ
A. MUTE [H]	AUDIO MUTE Ⓗ
A. OUT [L]	AUDIO OUTPUT (L)
A. OUT [R]	AUDIO OUTPUT (R)
A. RF OUT	AUDIO RF SIGNAL OUTPUT
A/VS/S. DATA	AV SW/SERIAL DATA
AC ONLINE	AC ONLINE
AC. O/EE. H	AC ONLINE/EE Ⓗ
AFC S C	AFC S CURVE
AFC [S]	AFC S CURVE
AFC. DEF	AFC DEFEAT
ARFC OUT	AUDIO RF SIGNAL OUTPUT
ART. V	ARTIFICIAL VERTICAL SYNC SIGNAL
ART. V. MM	ARTIFICIAL VERTICAL SYNC SIGNAL MONO MULTI
ART. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL Ⓗ/NORMAL
AT. V/H/N	ARTIFICIAL VERTICAL SYNC SIGNAL
ATSW/TEST/NOR/SE	TEST/NORMAL/SERVICE
AUDIO IN [L]	AUDIO INPUT (L)
AUDIO IN [R]	AUDIO INPUT (R)
AUDIO OUT [L]	AUDIO OUTPUT (L)
AUDIO OUT [R]	AUDIO OUTPUT (R)
AUDIO SELECT [H]	AUDIO SELECT Ⓗ
AUDIO. L	AUDIO (L)
AUDIO. R	AUDIO (R)
AV CNT	AV CONTROL
AV CTL	AV CONTROL
AV CTL/S. CLK	AV CONTROL/SERIAL CLOCK
AV. C.M.	AV CONTROL MODE
AVCNT/METER. R	AV CONTROL/LEVEL METER (R)
AVSW/METER. L	AV SW/LEVEL METER (L)
B MODE. H	B MODE Ⓗ
B.G.P	BURST GATE PULSE
BACKUP 5V	BACK UP 5V
BAND. U.E.	BAND U
BANDVL. D	BAND VL
BI/MI [L]	BILINGUAL/MIX Ⓛ
BIL	BILINGUAL
BIL [L]	BILINGUAL Ⓛ
BIL. [H]	BILINGUAL Ⓗ
BIL/M1 [L]	BILINGUAL Ⓛ
BS CLOCK	BS CLOCK
BS DATA	BS DATA
BS LCH IN	BS L CHANNEL INPUT
BS MIX [H]	BS MIX Ⓗ
BS MON [H]	BS MONITOR Ⓗ
BS MONI [H]	BS MONITOR Ⓗ
BS RCH IN	BS R CHANNEL INPUT
BS VIDEO	BS VIDEO SIGNAL
BS VIDEO/BS1	BS VIDEO SIGNAL
BS [H]	BS Ⓗ
BS. LEVEL	BS LEVEL
BS. M [H]	BS MONITOR Ⓗ
BS/VTR [H]	BS/VTR Ⓗ
BUS CLK	BUS CLOCK
BUS LSN	BUS LISTEN
BUS TLK	BUS TALK
BUZZER	BUZZER
CAP EC	CAPSTAN TORQUE CONTROL
CAP M GND	CAPSTAN MOTOR GND
CAP. ET	CAPSTAN TORQUE CONTROL
CAP. FG1	CAPSTAN FG1 PULSE
CAP. FG2	CAPSTAN FG2 PULSE
CAS. SW	CASSETTE SW
CCN	PLAYBACK CONTROL SIGNAL (–)
CCP	PLAYBACK CONTROL SIGNAL (+)
CHM	CONTROL SIGNAL (+)
CHP	CONTROL SIGNAL (–)
CINEM [L]	CINEMA Ⓛ
CINEMA [L]	CINEMA Ⓛ
CINEMA/MIX	CINEMA/MIX
CKL	RATCH LOCK
CKS	SHIFT LOCK
CL	CLOCK
CLK	CLOCK
CLK (C.G)	CLOCK
CLOCK. IN	CLOCK INPUT
CLP	CLAMP
COL/B/W/NOR	COLOUR/BLACK & WHITE/NORMAL
COLOR [H]	COLOUR Ⓗ
CONV	CONVERTOR
CS	CHIP SELECT
CTL GND	CONTROL GND
CTL HEAD [+]	CONTROL HEAD (+)
CTL HEAD [–]	CONTROL HEAD (–)
CTL [+]	CONTROL HEAD (+)
CTL [–]	CONTROL HEAD (–)
CUE BIAS	CUE BIAS
CURRENT LIM	CURRENT LIMMITER
CYL ET	CYLINDER TORQUE CONTROL

CYL GND	CYLINDER GND
D.F.M. REC [H]	DELAIED FM RECORDING Ⓗ
D. FM REC [L]	DELAIED FM RECORDING Ⓛ
D. GND	DIGITAL GND
D. REC [H]	DELAYED RECORDING Ⓗ
D4/S. LED	D4/STILL LED
D4/STILLED	D4/STILL LED
DAC [CLK]	TUNER DAC (CLOCK)
DAC/FSCS	TUNER DAC/FS CHIP SELECT
DAREC [H]	DELAYED AUDIO RECORDING Ⓗ
DATA	DATA
DECODER [L]	DECODER (L)
DECODER [R]	DECODER (R)
DEW	DEW
DEW SNS	DEW SENSOR
DFMRE [H]	DELAYED FM AUDIO RECORDING Ⓗ
E. REC 5V	EXCEPT RECORDING 5V
EC	ERROR TORQUE CONTROL
ECR	ERROR TORQUE CONTROL REFERENCE VOLTAGE
EDT TRIG [L]	EDIT TRIGGER Ⓛ
EDIT [H]	EDIT Ⓗ
EE [H]	EE Ⓗ
EE [H]/INS [M]	EE Ⓗ/INSERT Ⓜ
EE. VV. TR	EE/VV/TRICK PLAY
EJECT. PO	EJECT POSITION
EJECT/VDET	EJECT/REVERSE SLOW LOCK
ENV. SEL	ENVELOPE SELECT
ENVE. OUT	ENVELOPE OUTPUT
ENVE. SEL	ENVELOPE SELECT
ENV SELECT	ENVELOPE SELECT
EP [H]	LP Ⓗ
EP/LP [H]	LP Ⓗ
EP/LP/SP	LP/SP
EP/SS [H]	LP/SLOW/STILL/STOP Ⓗ
EPROMCS	EPROM CHIP SELECT
EX. REC 5V	EXCEPT RECORDING 5V
FF/REW [L]	FIRST FORWARD/REWIND Ⓛ
FG1 IN	FG1 PULSE INPUT
FG2 IN	FG2 PULSE INPUT
FILTER ADJUSTMENT	FILTER ADJUSTMENT
FLY ERASE [H]	FLYING ERASE HEAD ON Ⓗ
FLY ON [H]	FLYING ERASE HEAD ON Ⓗ
FLY. E [H]	FLYING ERASE HEAD ON Ⓗ
FM MUT [H]	FM AUDIO MUTE Ⓗ
FM MUTE [H]	FM AUDIO MUTE Ⓗ
FM OUT [L]	FM OUTPUT (L)
FM OUT [R]	FM OUTPUT (R)
FM PACK OUT [L]	FM PACK OUTPUT (L)
FM PACK OUT [R]	FM PACK OUTPUT (R)
FM/BS SEL [L]	FM/BS SELECT (L)
FM/BS SEL [R]	FM/BS SELECT (R)
FS. CLK	FS CLOCK
FUL. E [H]	FULL ERASE HEAD ON Ⓗ
FULL. E [H]	FULL ERASE HEAD ON Ⓗ

FULL. E. 12V	FULL ERASE 12V
GND [A]	GND (ANALOG)
GND [TU]	GND (TUNER)
GND/N. SW. 12V	GND/NON SW 12V
H. SYNC	HORIZONTAL SYNC
H. AMP. SW	HEAD AMP SW PULSE
H. P <R>	HEAD PHONE (R)
H. P <L>	HEAD PHONE (L)
H. P GND	HEAD PHONE GND
H. P OUT [L]	HEAD PHONE OUTPUT (L)
H. P OUT [R]	HEAD PHONE OUTPUT (R)
H. SW	HEAD SW PULSE
HEAD PHONE [L]	HEAD PHONE (L)
HEAD PHONE [R]	HEAD PHONE (R)
HEAD SW	HEAD SW
HEATER [+]	HEATER (+)
HEATER [–]	HEATER (–)
HSS	HORIZONTAL SYNC SIGNAL
HTR [+]	HEATER (+)
HTR [–]	HEATER (–)
I RFE	REFERENCE CURRENT
ICL	CONTROL AGC CIRCUIT
IF	INTERMEDIATE FREQUENCY
IN SELA1	INPUT SELECT A1 POSITION
IN SELA2	INPUT SELECT A2 POSITION
IN SELA3	INPUT SELECT A3 POSITION
INS L/R [L]	INSERT Lch/Rch Ⓛ
INS. [H]	INSERT Ⓗ
INSEL A1	INPUT SELECT A1 POSITION
INSEL A2	INPUT SELECT A2 POSITION
INSERT	INSERT
INSERT [H]	INSERT Ⓗ
IO CS	INPUT/OUTPUT CHIP SELECT
JOG1	JOG1
JOG S3 LED/FOWRD	JOG LED/FORWARD LED
JOG/F. LED	JOG LED/FORWARD LED
JSB [H]	JSB Ⓗ
JST. CLCK	JUST CLOCK
JST. CLK	JUST CLOCK
JST. CLOCK	JUST CLOCK
L. OUT	Lch OUTPUT
L. CH [H]	Lch Ⓗ
L. CH [L]	Lch Ⓛ
LED (MAIN)	LED (MAIN)
LED (STEREO)	LED (STEREO)
LED (SUB)	LED (SUB)
LED CKL	LED SERIAL CLOCK
LED CKS	LED SERIAL CLOCK
LED DATA	LED SERIAL DATA
LINE IN 1 [L]	LINE INPUT 1 (L)
LINE IN 1 [R]	LINE INPUT 1 (R)
LINE IN 2 [L]	LINE INPUT 2 (L)
LINE IN 2 [R]	LINE INPUT 2 (R)
LINE IN V	LINE INPUT VIDEO
LINE IN [L]	LINE INPUT (L)

LINE IN [R]	LINE INPUT (R)
LINE OUT [L]	LINE OUTPUT (L)
LINE OUT [R]	LINE OUTPUT (R)
LP [H]	LP Ⓗ
LPTRI [L]	LP TRICK PLAY Ⓛ
Lch/A. DUB	Lch/AUDIO DUBBING
M GND	MOTOR GND
M REG	MOTOR REGULATOR
MAIN OUT	MAIN OUTPUT
MAIN [L]	MAIN Ⓛ
MAIN/MONO	MAIN/MONAURAL
MAX IN	MAXIMAM INPUT
MES [H]	MESECAM Ⓗ
MESE [H]	MESECAM Ⓗ
MESE [L]	MESECAM Ⓛ
METER 5V	LEVEL METER 5V
METER [L]	LEVEL METER (L)
METER [R]	LEVEL METER (R)
METER. L/AVS	LEVEL METER (L)
METER. R/AVC	LEVEL METER (R)
MI/BI [L]	MIX Ⓗ/BILIGUAL
MIC GND	MIC GND
MIC IN	MIC INPUT
MIC IN [L]	MIC INPUT (L)
MIC IN [R]	MIC INPUT (R)
MIC [H]	MIC Ⓗ
MIX [H]	MIX Ⓗ
MIX [H]/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINE	MIX Ⓗ/CINEMA SOUND Ⓛ
MIX/CINEMA [L]	MIX Ⓗ/CINEMA SOUND Ⓛ
MN. H/M. L	MONAURAL Ⓗ/MAIN Ⓛ
MN. H/MAI. L	MONAURAL Ⓗ/MAIN Ⓛ
MN2/MES. L	MONAURAL 2/MESECAM Ⓛ
MODE SEL	AUDIO MODE SELECT
MODE SW	AUDIO MODE SW
MODE. S. IN	AUDIO MODE SELECT INPUT
MODE. S. OUT	AUDIO MODE SELECT OUTPUT
MONO [H]	MONAURAL Ⓗ
MONO [H]/MAIN [L]	MONAURAL Ⓗ/MAIN Ⓛ
MONO2 [L]	MONAURAL 2
MONO2/MESE [FM(L)]	MONAURAL 2/MESECAM (FM Ⓛ)
MOTOR GND	MOTOR GND
MUTE	MUTE
N. A. REC [L]	NORMAL AUDIO RECORDING
N. SW 12V	NON SW 12V
N. SW. 5. DET	NON SW 5V DETECT
NICAM	NICAM
NICAM [L]	NICAM Ⓛ
NOL [H]	PAL Ⓗ/4.43 NTSC Ⓜ/3.58 NTSC Ⓛ
NOR/SOFT [H]	NORMAL/SOFT TAPE PLAY Ⓗ
NORMAL [H]	NORMAL Ⓗ
NR BIAS	NR BIAS
NTSC [L]	NTSC Ⓛ
OCH	CONTROL AGC CIRCUIT
OUT	OUTPUT

P-OFF [H]	POWER OFF Ⓗ
P-OFF [L]	POWER OFF Ⓛ
P. FAIL	POWER FAILURE DETECT
P. OFF [H]	POWER OFF Ⓗ
P. OFF [L]	POWER OFF Ⓛ
PAL [H]	PAL Ⓗ
PAL [L]/NTSC [H]	PAL Ⓛ/NTSC Ⓗ
PB ADJ OUT	PLAYBACK ADJUST OUTPUT
PB OUT	PLAYBACK OUTPUT
PB. H	PLAYBACK Ⓗ
PFG	PG/FG
PHOTSN +B	PHOTO SENSOR +B
PICT. CNT	PICTURE CONTROL
PLAY LED/RVS LED	PLAY LED/REVERSE LED
PLAY. PO	PLAY POSITION
PLAY/R. LED	PLAY LED/REVERSE LED
PLY/DEW	PLAY/DEW Ⓗ
POWER OFF [L]	POWER OFF Ⓛ
PREROLL [H]	PREROLL Ⓗ
PWRFAIL	POWER FAILURE DETECT
R. CH [H]	Rch Ⓗ
R. CH [L]	Rch Ⓛ
R. ST	RESET
R/S/F	REVERSE Ⓗ/STOP Ⓜ/FORWARD Ⓛ
RCH [H]	Rch Ⓗ
REC 12V	RECORDING 12V
REC CHROMA	RECORDING CHROMINANCE SIGNAL
REC H	RECORDING Ⓗ
REC IN	RECORDING INPUT
REC OUT [L]	RECORDING OUTPUT Ⓛ
REC START	RECORDING START
REC VR [C]	RECORDING VOLUME (COMMON)
REC VR [L]	RECORDING VOLUME (L)
REC VR [R]	RECORDING VOLUME (R)
REC Y	RECORDING LUMINANCE SIGNAL
REC [H]	RECORDING Ⓗ
REC. C	RECORDING CHROMINANCE SIGNAL
REC. Y	RECORDING LUMINANCE SIGNAL
REC/EE CTL	RECORDING/EE CONTROL
REEL-T	REEL PULSE (TAKE-UP)
REEL-S	REEL PULSE (SUPPLY)
REGULATOR FILTER	REGULATOR FILTER
RESET	RESET
REV M F/R	REVIEW MOTOR FORWARD/REVERSE
REV M V1	REVIEW MOTOR V1
REV M V2	REVIEW MOTOR V2
REV MOTOR F/R	REVIEW MOTOR FORWARD/REVERSE
REV MOTOR V1	REVIEW MOTOR V1
REV MOTOR V2	REVIEW MOTOR V2
REV MOTOR [+]	REVIEW MOTOR (+)
REV MOTOR [–]	REVIEW MOTOR (+)
REV. M. GND	REVIEW MOTOR GND
RF. CHROMA	RF CHROMINANCE SIGNAL

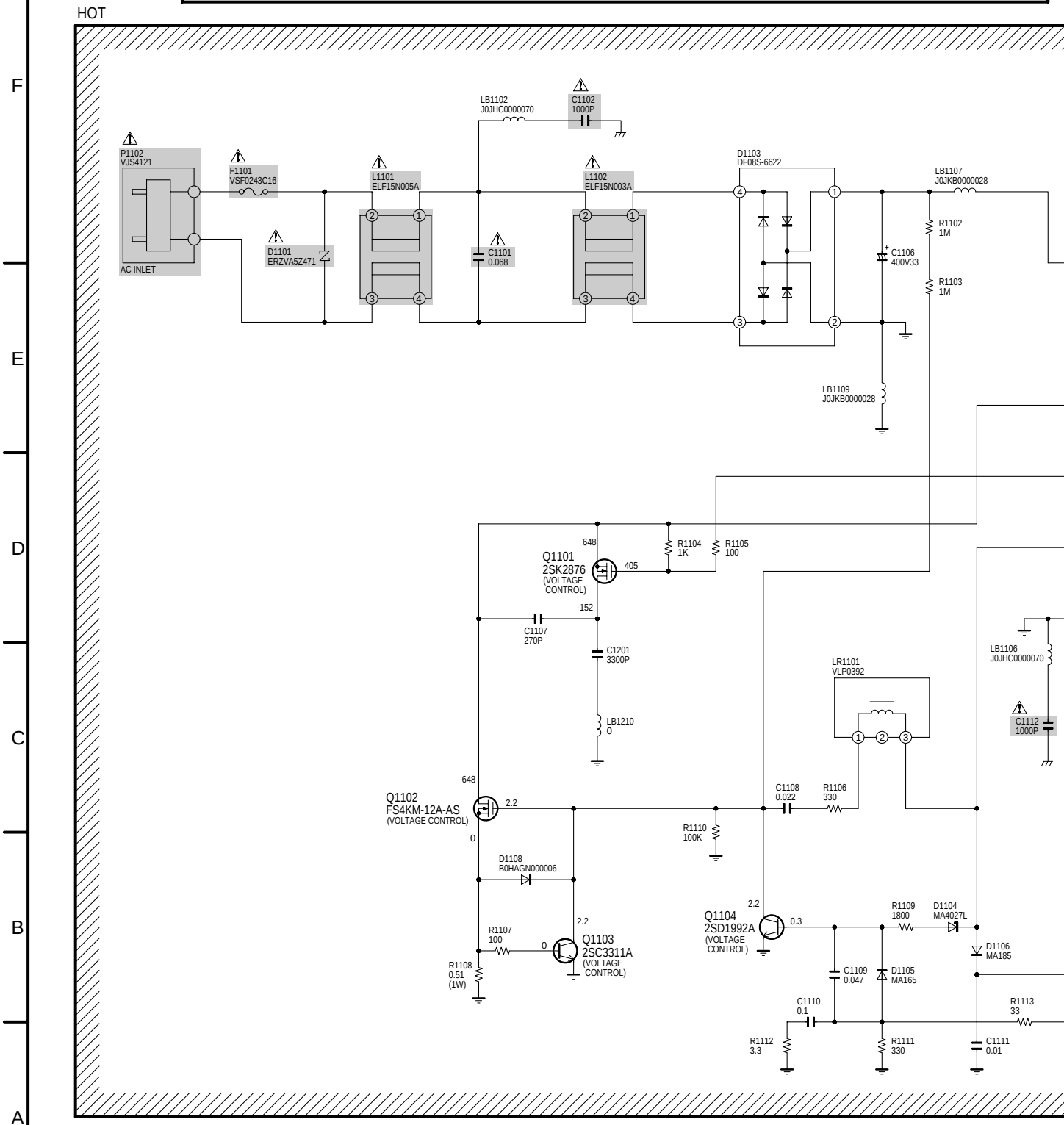
RF OUT	RF OUTPUT
RF Y	RF LUMINANCE SIGNAL
RF. Y. IN	RF LUMINANCE SIGNAL INPUT
RF. Y. OUT	RF LUMINANCE SIGNAL OUTPUT
ROTAR. SW	ROTARY SW
ROTARY	ROTARY SW
RST	RESET
RST [L]	RESET Ⓛ
Rch/INST	Rch/INSERT
S IN	SERIAL DATA INPUT
S OUT	SERIAL DATA OUTPUT
S-PHOTO	SUPPLY PHOTO TRANSISTOR
S-RL. PLS	SUPPLY REEL PULSE
S. CLK	SERIAL CLOCK
S. CLK/AV	SERIAL CLOCK/AV
S. DATA	SERIAL DATA
S. DATA/A	SERIAL DATA
S. PHOTO	SUPPLY PHOTO TRANSISTOR
S. TAB [L]	SAFETY TAB SW ON Ⓛ
S/P/N	SECAM/PAL/NTSC
SC IN	SERIAL CLOCK INPUT
SC OUT	SERIAL CLOCK OUTPUT
SCK SELECT	SERIAL CLOCK SELECT
SEL OUT [L]	SELECT OUTPUT (L)
SEL OUT [R]	SELECT OUTPUT (R)
SHUTTLE 1	SHUTTLE 1
SIF	SOUND INTERMEDIATE FREQUENCY
SLMUT [H]	INPUT SELECT MUTE Ⓗ
SLNID [+]	SOLENOID (+)
SLNID [–]	SOLENOID (–)
SLW TR. MM	SLOW TRACKING MONO MULTI
SLW TR. REF	SLOW TRACKING REFERENCE VOLTAGE
SNS. GND	SENSOR GND
SOFT [H]	SOFT TAPE PLAY Ⓗ
SOFT [H]/NORMAL	SOFT TAPE PLAY Ⓗ/NORMAL Ⓗ
SOLENOID ON [L]	SOLENOID ON Ⓛ
SP [H]	SP Ⓗ
SP/L/SLP	SP/LP
SSS [L]	SLOW/STILL/STOP
STEREO LED	STEREO LED
STEREO [H]	STEREO Ⓗ
STEREO [L]	STEREO Ⓛ
STOP. PO	STOP POSITION
STOP/5V	STOP POSITION/5V
STOP1/TAPE SEL	STOP1 POSITION/TAPE SELECT
STOP1/PAL:ST	STOP1 POSITION/PAL
STOP2. PO	STOP 2 POSITION
STOP2/S-TAB	STOP 2 POSITION/SAFETY TAB SW
STREO [H]	STEREO Ⓗ
SUB BIAS	SUB BIAS
SUB. SW	SUB SW
SVHS CAS [L]	S-VHS CASSETTE Ⓛ
SW. 5. DET	SW 5V DETECT
SYNC [L]	SYNC Ⓛ
SYSCON 5V	SYSTEM CONTROL 5V
SYSTEM	SYSTEM SW
T-PHOTO	TAKE-UP PHOTO TRANSISTOR
T-RL. PLS	TAKE-UP REEL PULSE
T. BUSCLK	TIMER BUS CLOCK
T. BUSLSN	TIMER BUS LISTEN
T. BUSTLK	TIMER BUS TALK
T. END [L]	TAPE END Ⓛ
T. PHOTO	TAKE-UP PHOTO TRANSISTOR
TAPE END [L]	TAPE END Ⓛ
TAPE END [L]/CAM	TAPE END Ⓛ/CAMERA PAUSE
TEST	TEST MODE
TPZ	TRAPEZOIDAL WAVE CIRCUIT
TRIC [L]	TRIC PLAY Ⓛ
TRICK [L]	TRIC PLAY Ⓛ
TRK. ENV	AUTO TRACKING ENVELOPE DETECT
TU. AUDIO	TUNER AUDIO
TU. GND	TUNER GND
TU. V. IN	TUNER VIDEO SIGNAL INPUT
TU. VIDEO	TUNER VIDEO
TUN NOR IN	TUNER NORMAL INPUT
TUN R	TUNER AUDIO (R)
TUN. AUDIO IN	TUNER AUDIO INPUT
TUNER 12V	TUNER 12V
TUNER L	TUNER AUDIO (L)
TUNER V IN	TUNER VIDEO SIGNAL INPUT
TUNER [L]	TUNER AUDIO (L)
TUNER [N]	TUNER AUDIO (NORMAL)
TUNER [R]	TUNER AUDIO (R)
TUNER. 12	TUNER 12V
TUOFF [H]	TUNER OFF Ⓗ
TV. AUDIO	TV AUDIO
TV/VTR	TV/VTR
TXTON [L]	TEXT ON Ⓛ
U. REG45V	UNREGULATOR 45V
UNREG	UNREGULATOR
UNREG19V	UNREGULATOR 19V
V. REF	REFERENCE VOLTAGE
V. EE [H]	VIDEO EE Ⓗ
V. EE [L]	VIDEO EE Ⓛ
VCO REF	REFERENCE OSCILLATER
VD. IN	VIDEO SIGNAL INPUT
VD. OUT	VIDEO SIGNAL OUTPUT
VIDEO EE [L]	VIDEO EE Ⓛ
VIDEO IN	VIDEO SIGNAL INPUT
VIDEO OUT	VIDEO SIGNAL OUTPUT
VM	MOTOR VOLTAGE
VM DOWN [L]	MOTOR VOLTAGE DOWN Ⓛ
VSS	VERTICAL SYNC SIGNAL
VTR [H]	VTR Ⓗ
VTR. 12V	VTR 12V
X IN	OSCILLATOR INPUT
X OUT	OSCILLATOR OUTPUT

8 SCHEMATIC DIAGRAMS

8.1. POWER TRANSFORMER SECTION IN MAIN SCHEMATIC DIAGRAM

CAUTION

THE STRIPED FRAME INDICATES THE PRIMARY CIRCUIT TO DISTINGUISH THE PRIMARY FROM THE SECONDARY CIRCUIT.
PAY ATTENTION NOT TO RECEIVE AN ELECTRIC SHOCK DURING REPAIR AND SERVICE OF THE PRODUCTS.

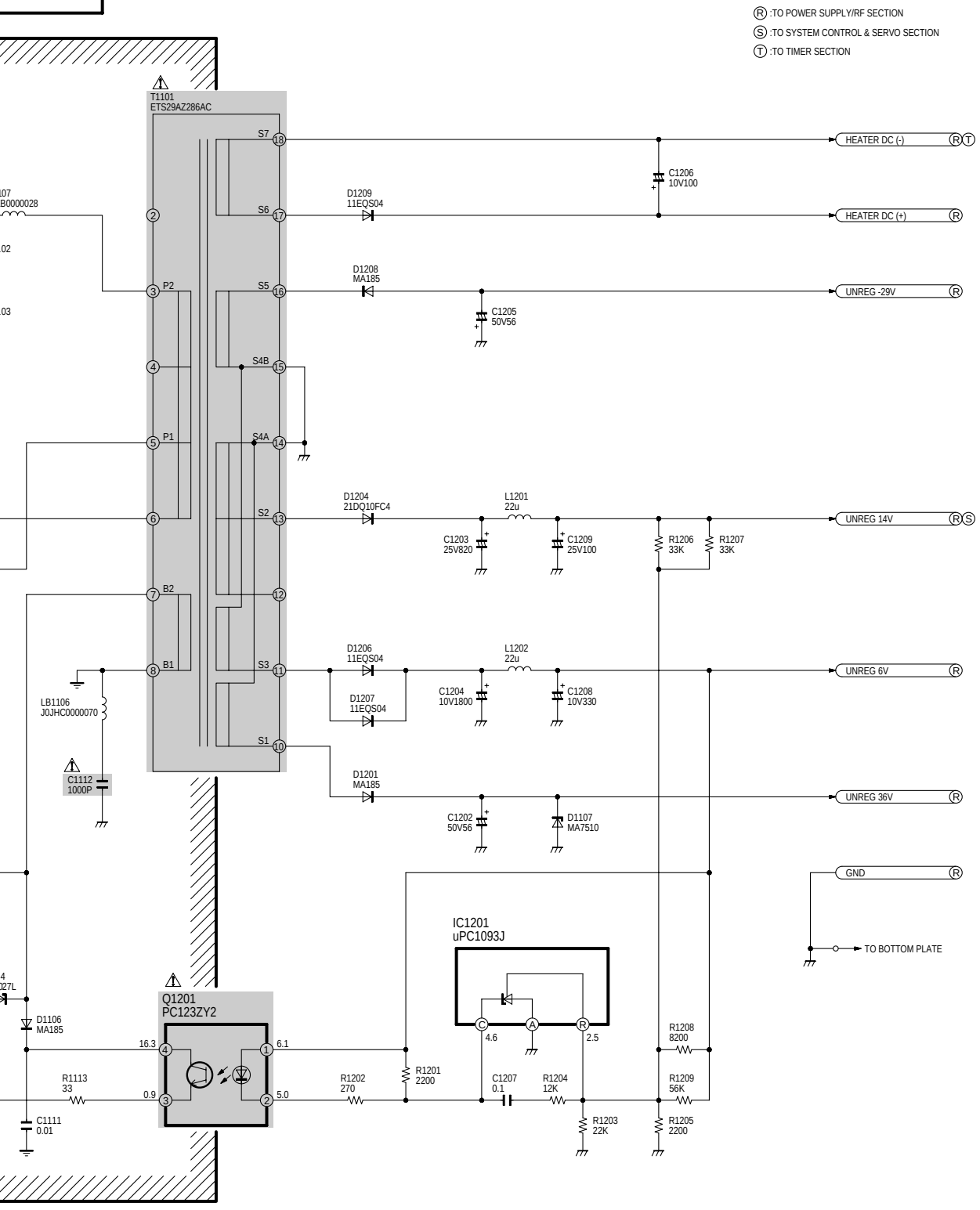


IMPORTANT SAFETY NOTICE:
COMPONENTS IDENTIFIED WITH THE MARK ⚠ HAVE THE SPECIAL CHARACTERISTICS FOR SAFETY.
WHEN REPLACING ANY OF THESE COMPONENTS,USE ONLY THE SAME TYPE.

NOTE1:WHEN MEASURE THE VOLTAGE OR WAVEFORM ON THE POWER TRANSFORM
CIRCUIT,SET THE GND TERMINAL OF MEASURING POINT AS FOLLOWS.
PRIMARY SIDE..... ⏚
SECONDARY SIDE... ⏚
NOTE2:THE DC VOLTAGE INDICATED IN PRIMARY SIDE IS SHOWN THE VOLTAGE WH
INPUT AC IS 240V.

M

RIMARY
ERVICE OF



E POWER TRANSFORMER
NT AS FOLLOWS.

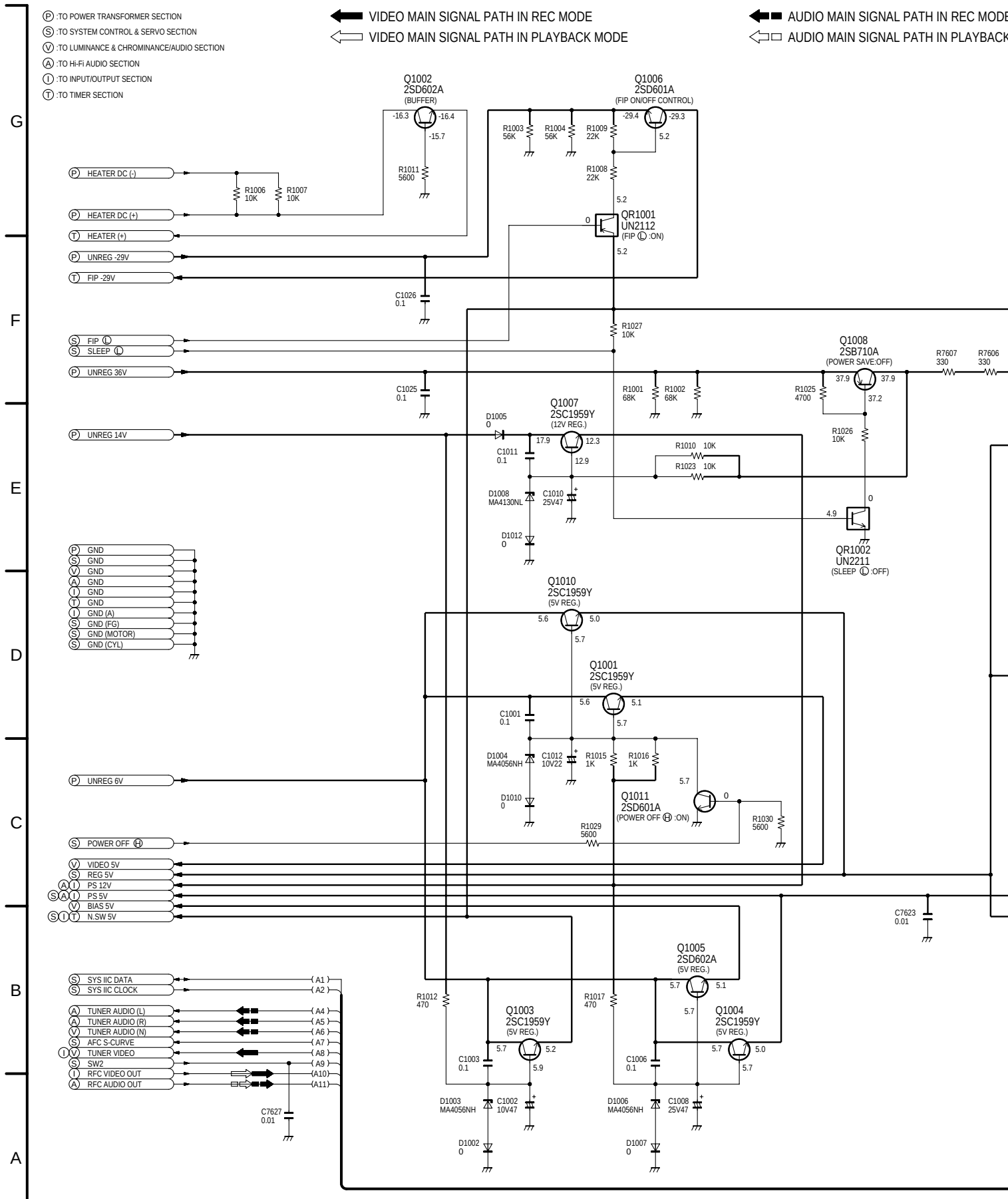
WN THE VOLTAGE WHEN

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.
NOTE:THE MEASURMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NV-FJ632EE
POWER TRANSFORMER
SECTION SCHEMATIC DIAGRAM

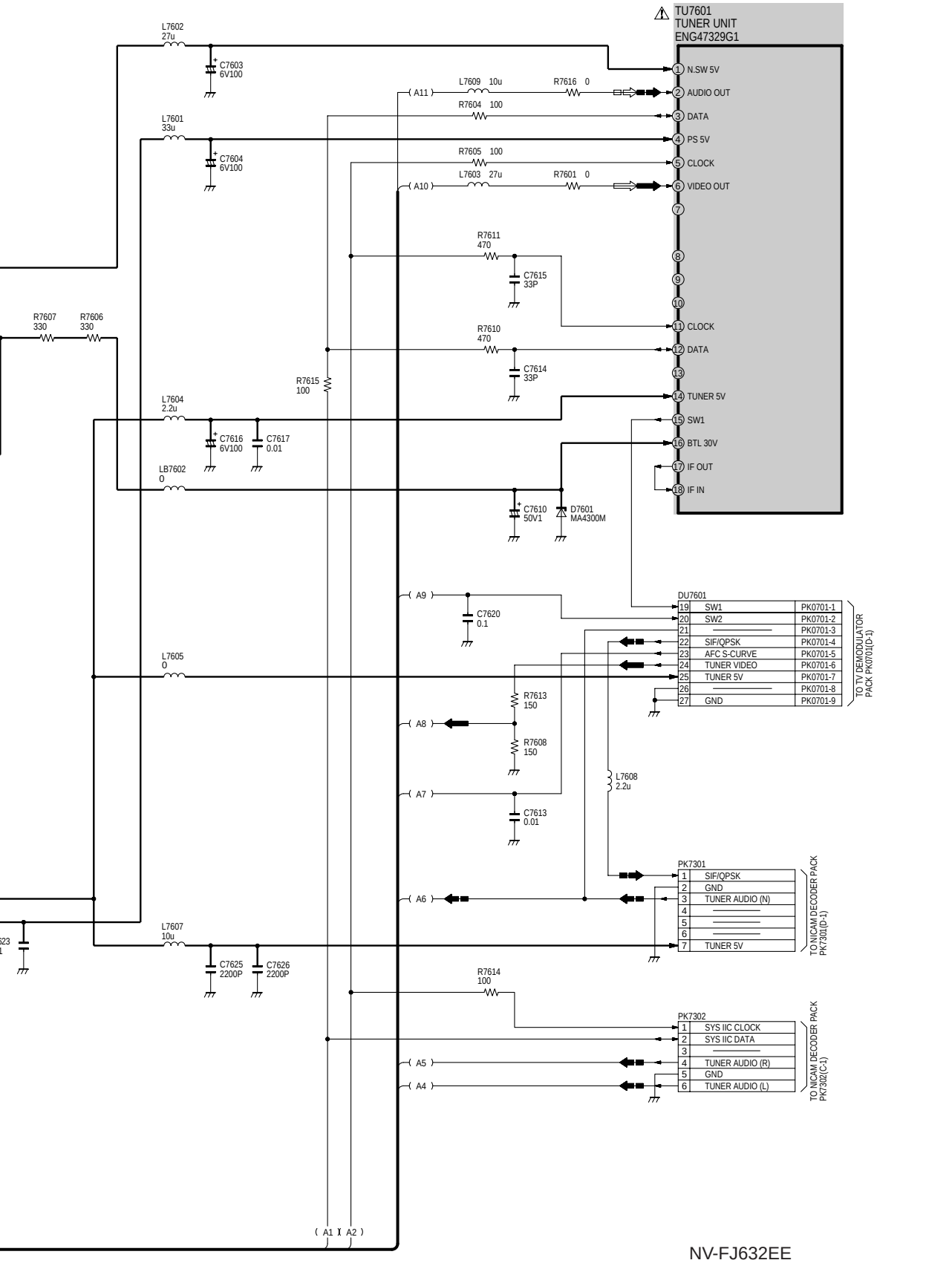
6 | 7 | 8 | 9 | 10

8.2. POWER SUPPLY/ RF SECTION IN MAIN SCHEMATIC DIAGRAM



PATH IN REC MODE

PATH IN PLAYBACK MODE



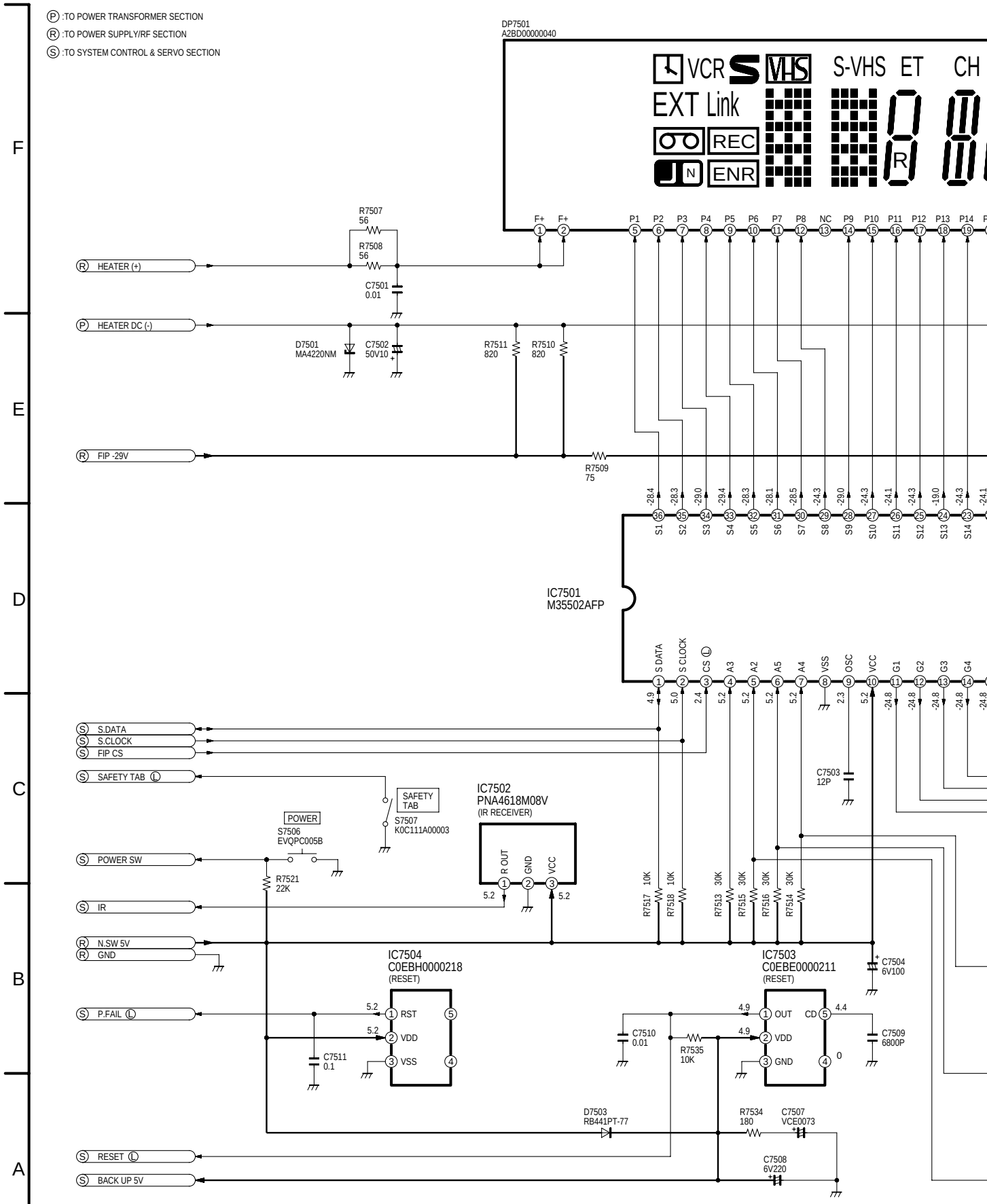
NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

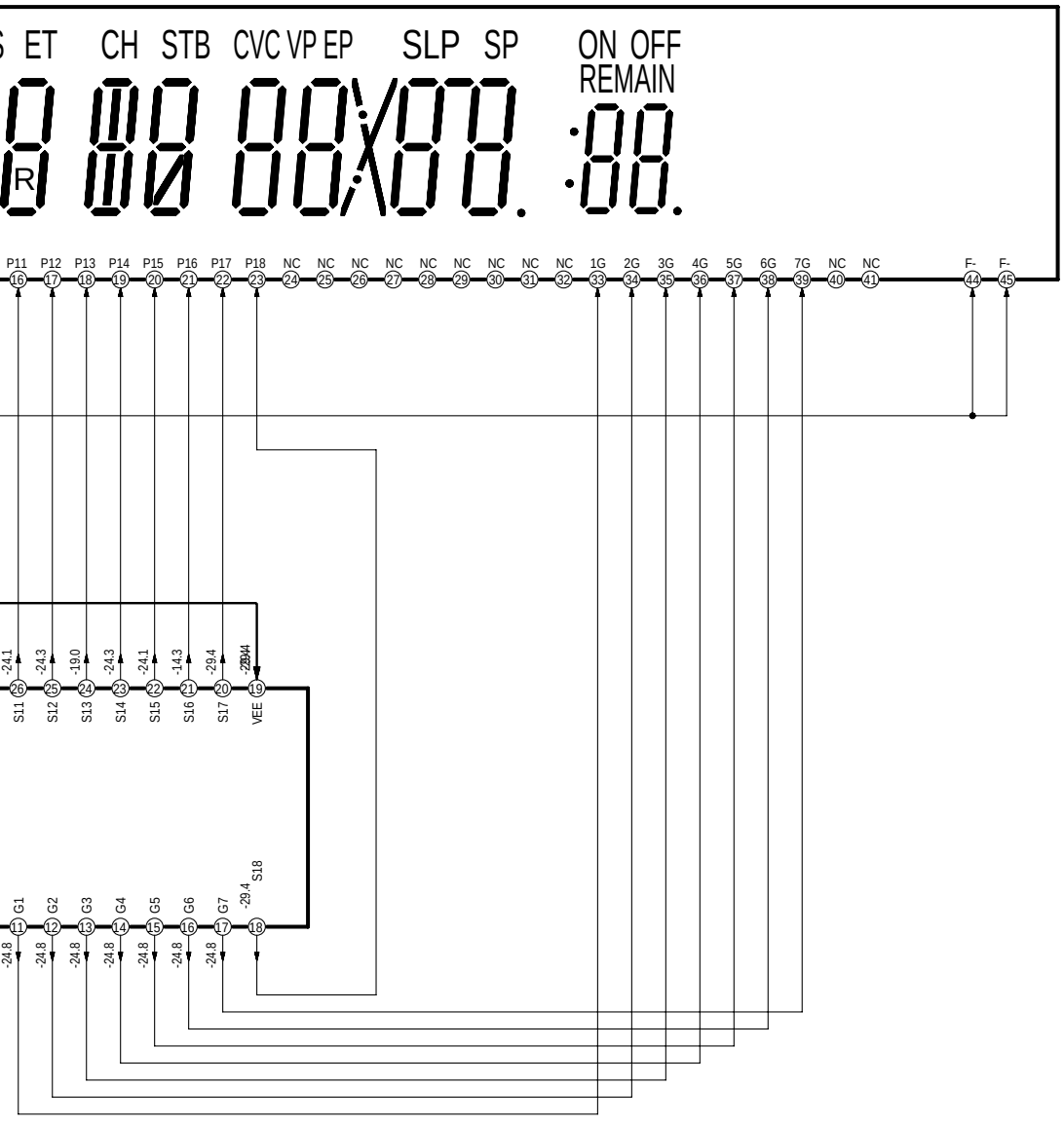
TOP MODE.

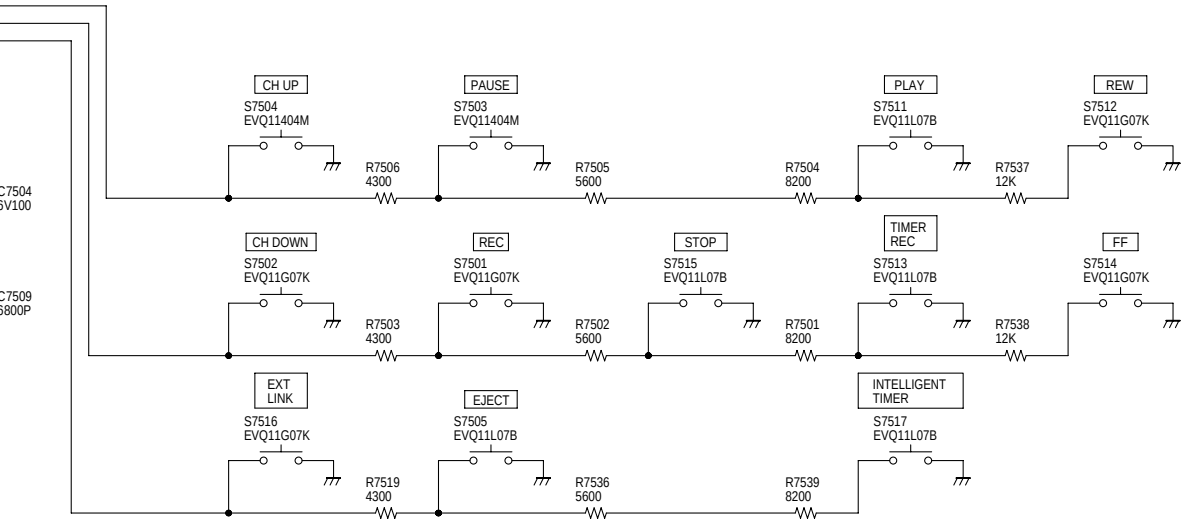
NV-FJ632EE
POWER SUPPLY/RF SECTION
SCHEMATIC DIAGRAM

6 | 7 | 8 | 9 | 10

8.3. TIMER SECTION IN MAIN SCHEMATIC DIAGRAM





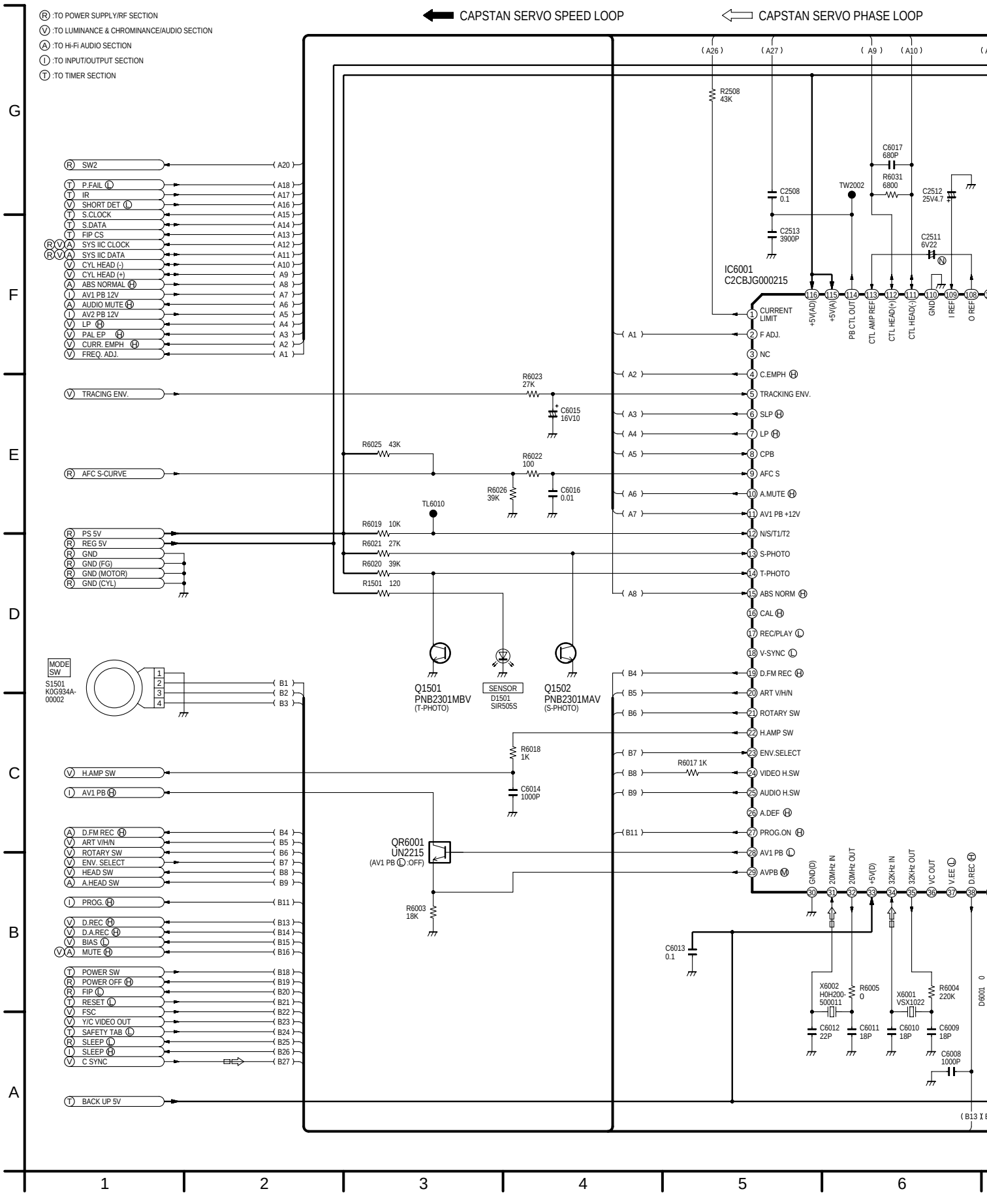


NV-FJ632EE
TIMER SECTION
SCHEMATIC DIAGRAM

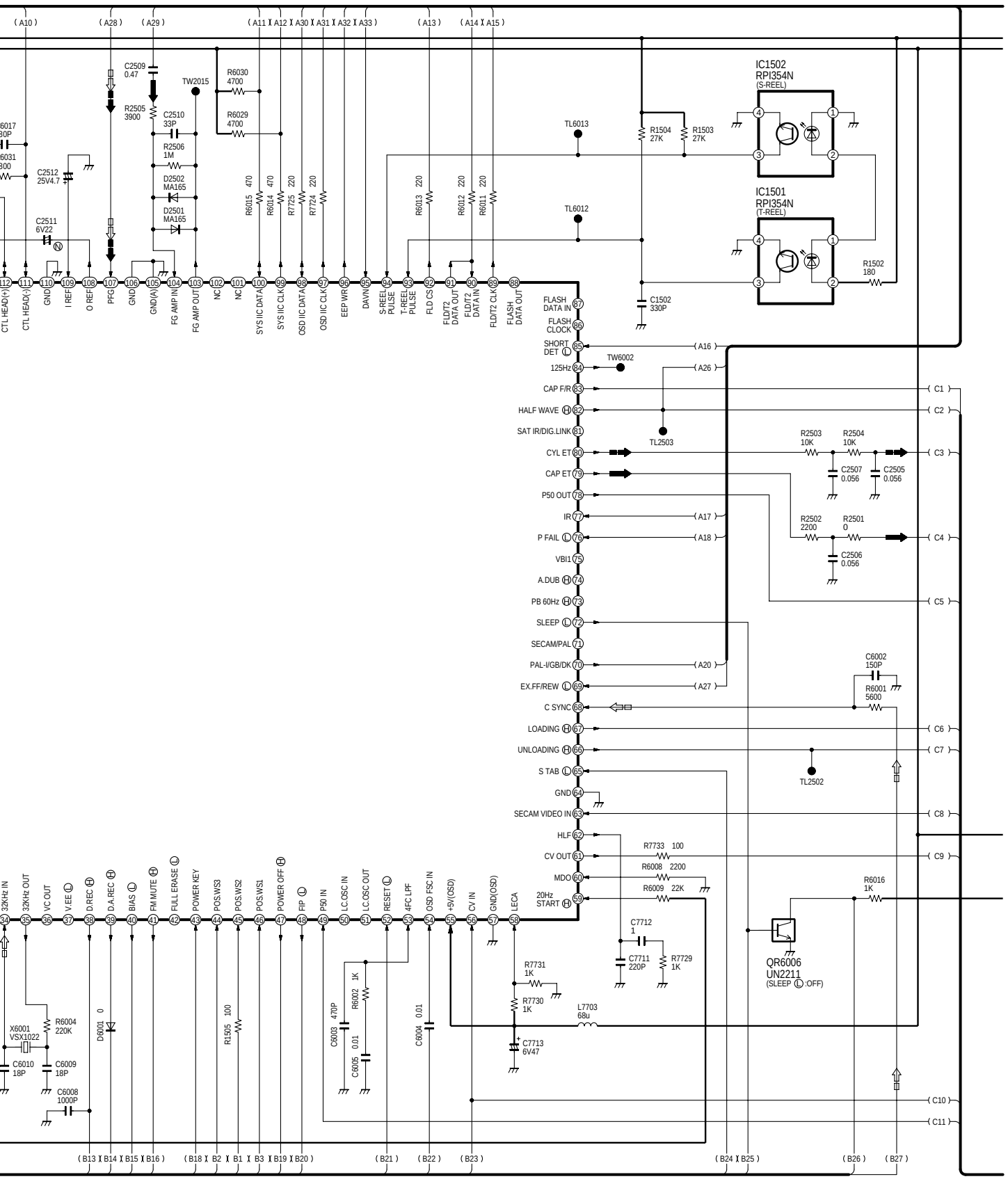
NOTE:DO NOT USE PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

5 6 7 8 9

8.4. SYSTEM CONTROL & SERVO SECTION IN MAIN SCHEMATIC DIAGRAM

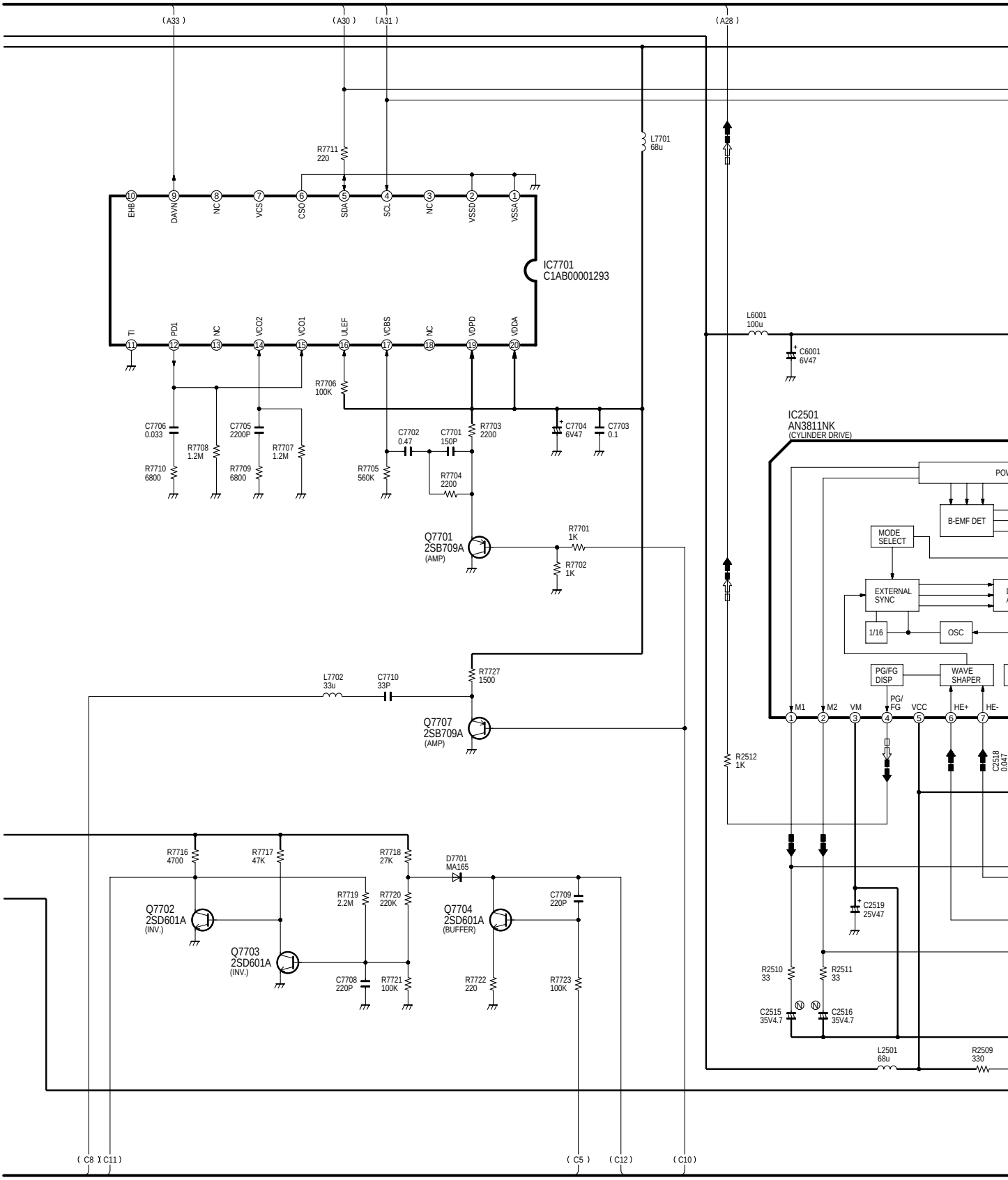


E LOOP ◀■■ CYLINDER SERVO SPEED LOOP ⇦□□ CYLINDER SERVO PHASE LOOP



NV-FJ632EE
SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

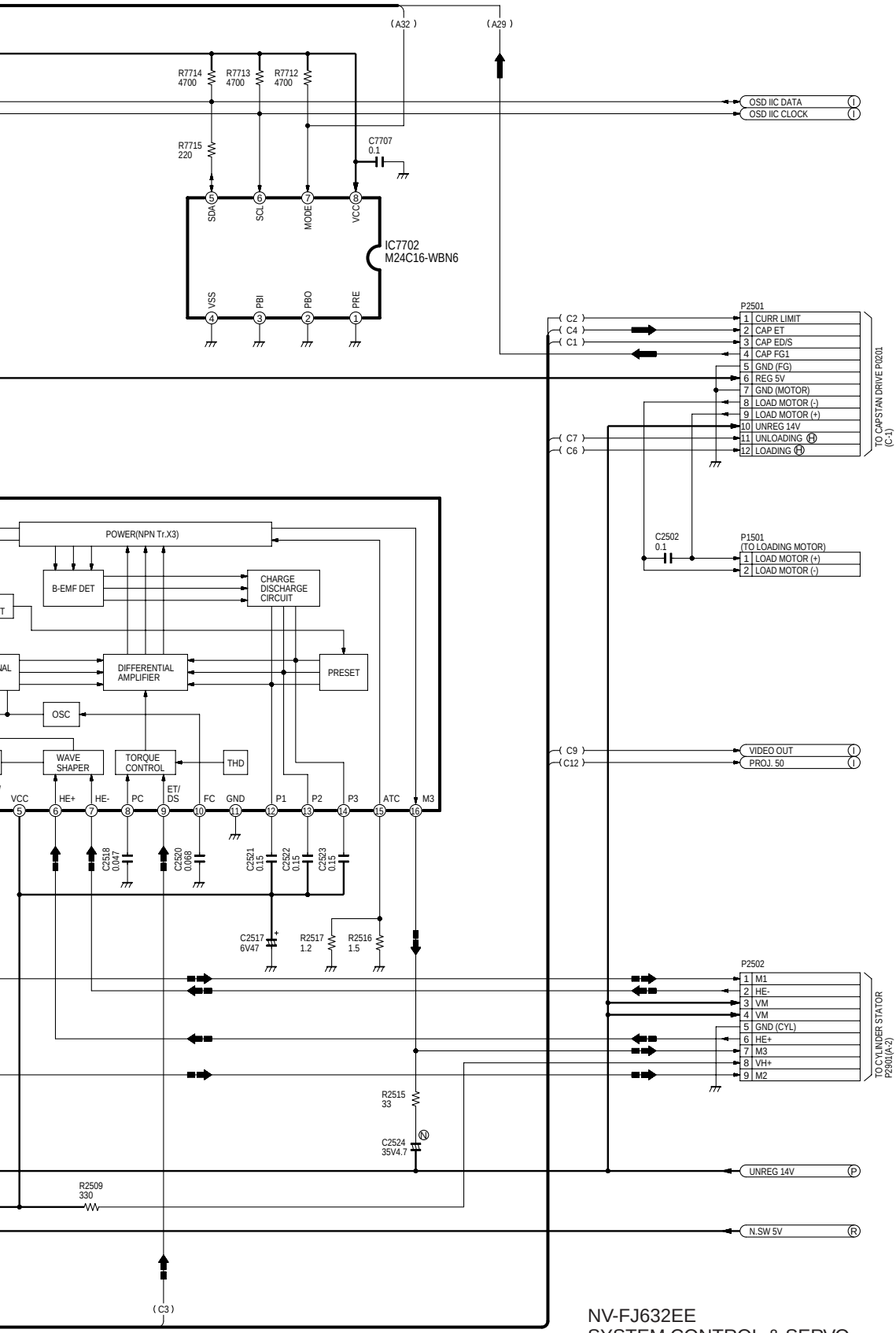
6 | 7 | 8 | 9 | 10 | 11



NV-FJ632EE
SYSTEM CONTROL & SERVO SECTION SCHEMATIC DIAGRAM

NOTE:DO NOT USE
ORDERING.

12 | 13 | 14 | 15 | 16 | 17

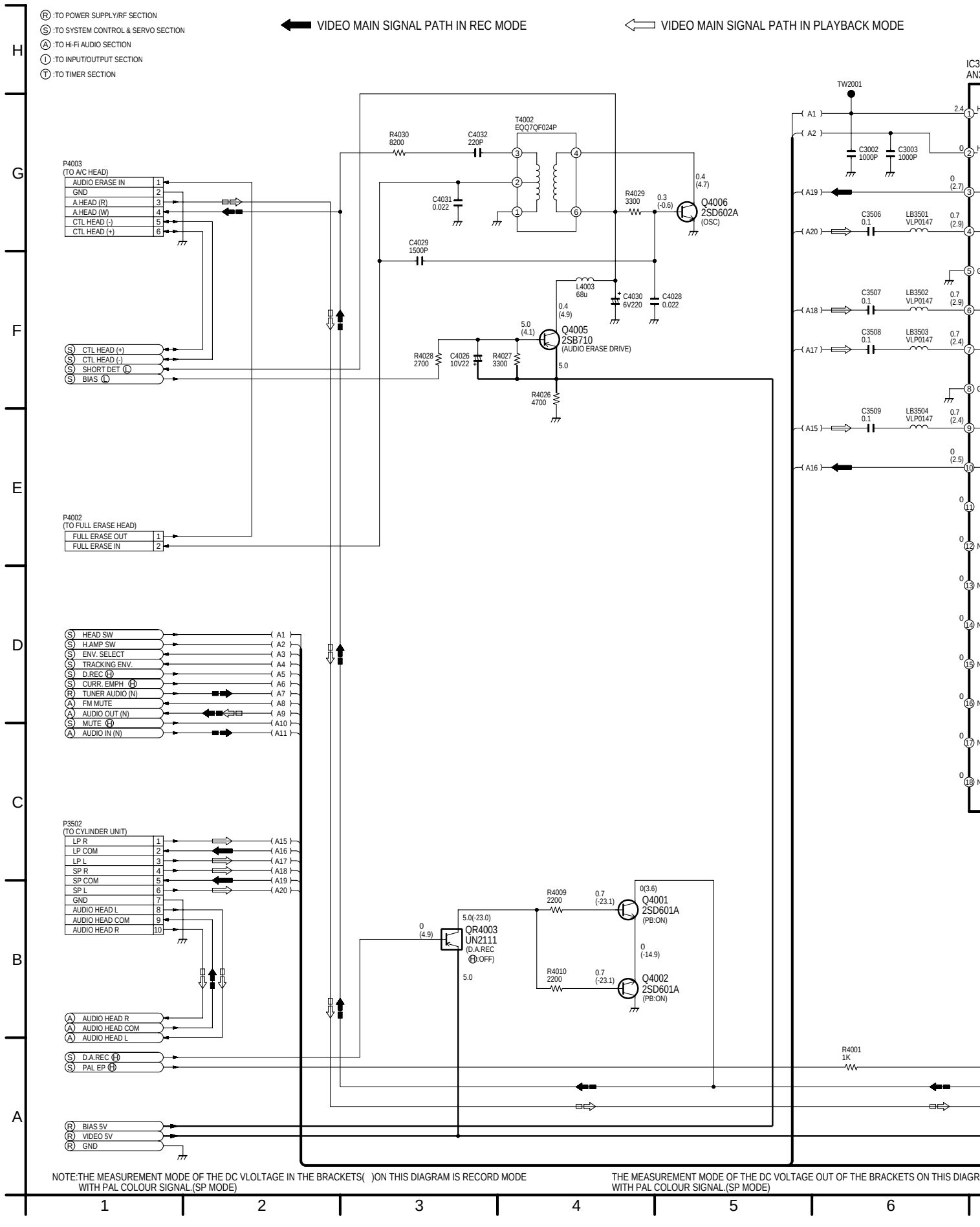


NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
SYSTEM CONTROL & SERVO
SECTION SCHEMATIC DIAGRAM

18 19 20 21

8.5. LUMINANCE & CHROMINANCE/ AUDIO SECTION IN MAIN SCHEMATIC DIAGR

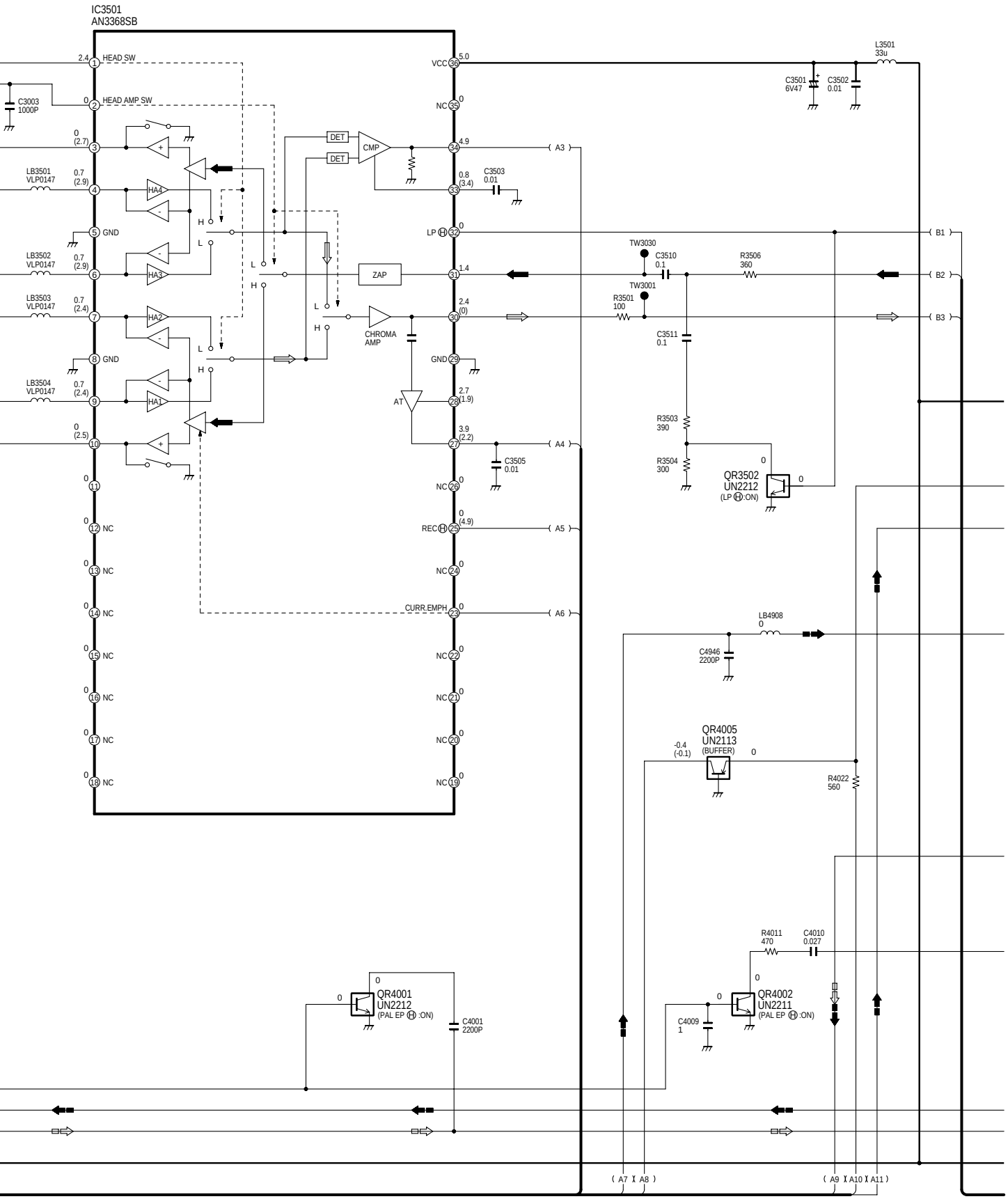


NOTE:THE MEASUREMENT MODE OF THE DC VLOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGR WITH PAL COLOUR SIGNAL.(SP MODE)

C DIAGRAM

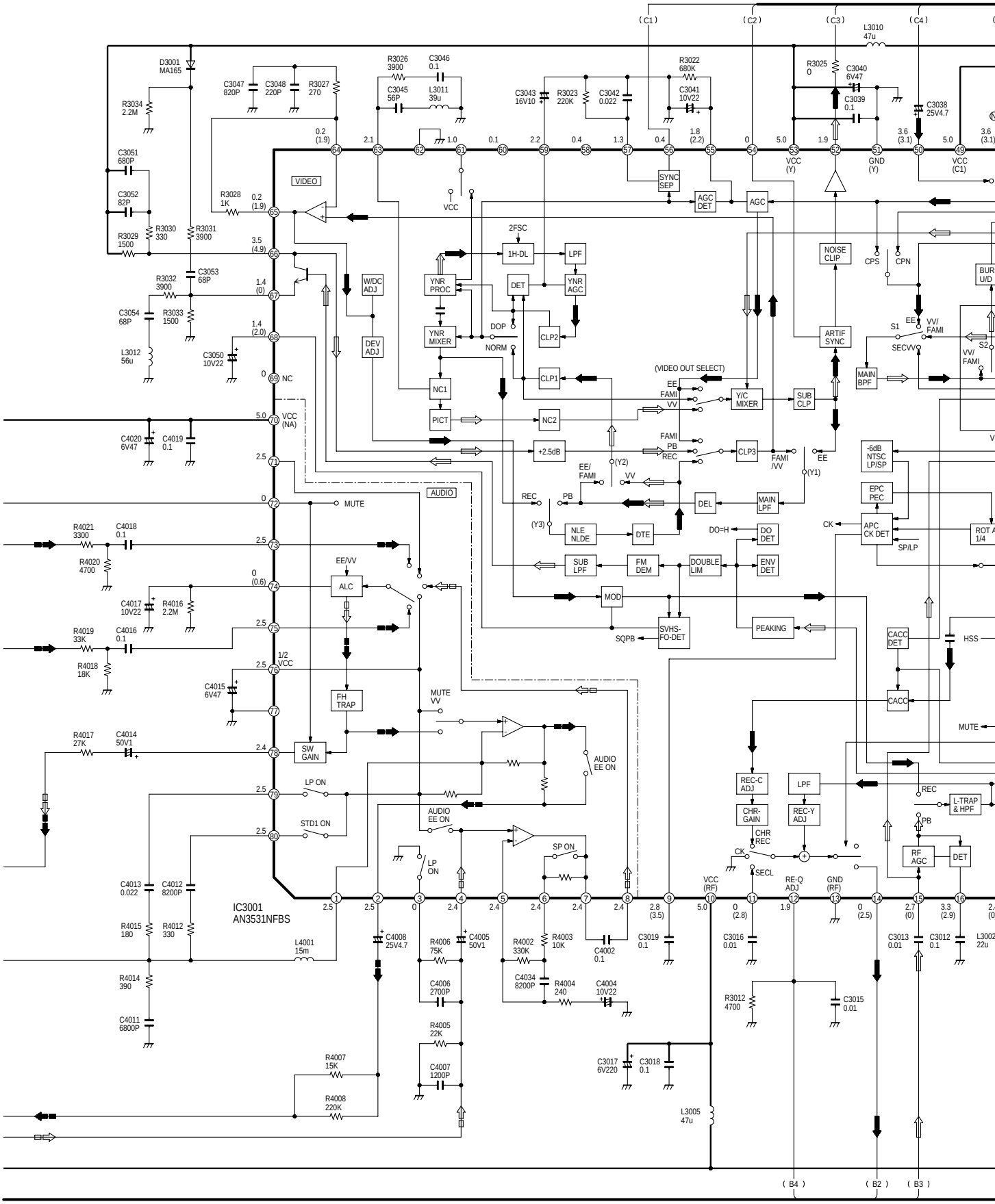
ODE ◀■ AUDIO MAIN SIGNAL PATH IN REC MODE ⇦□ AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



ACKETS ON THIS DIAGRAM IS PLAYBACK MODE

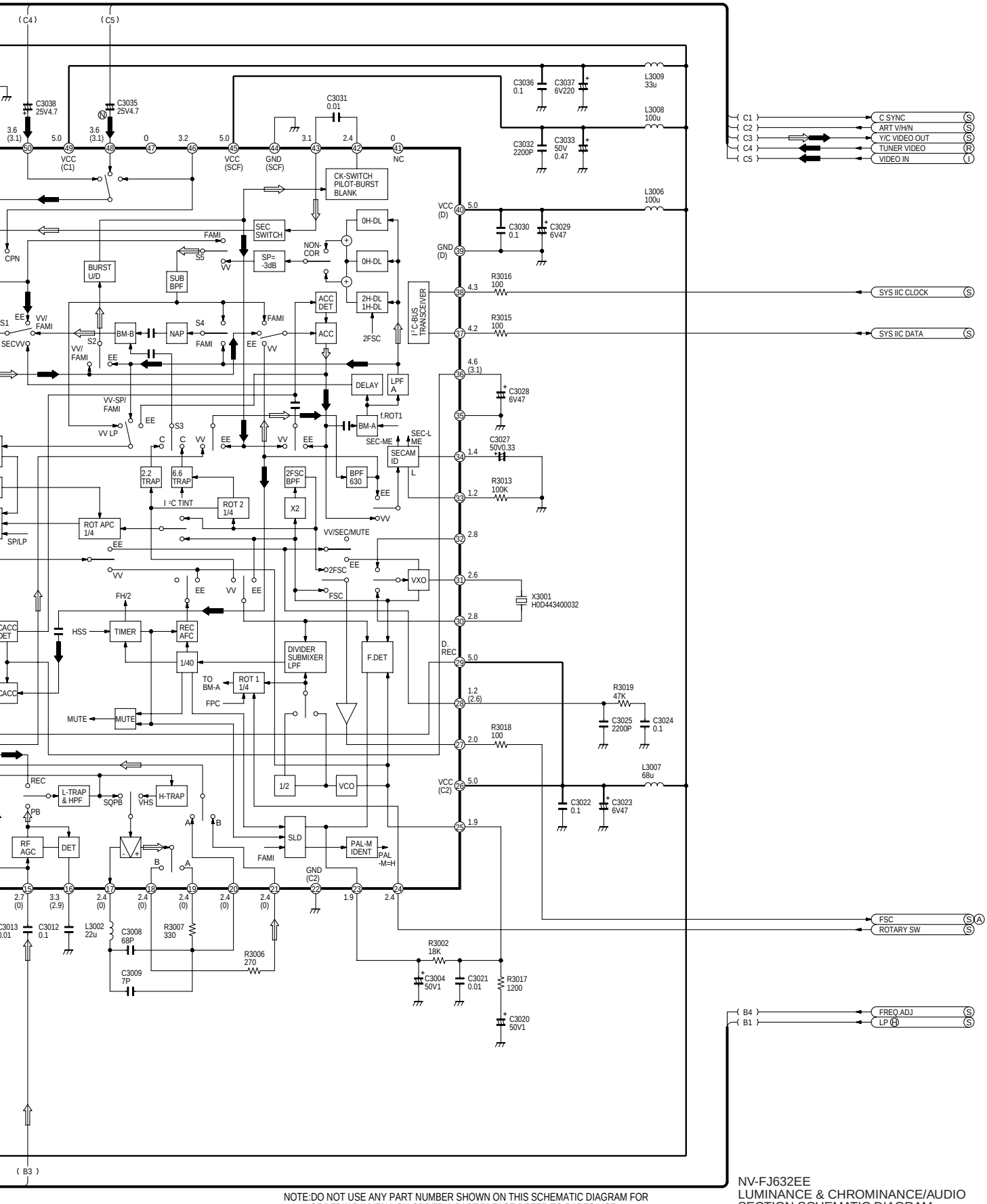
NV-FJ632EE
LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

6 | 7 | 8 | 9 | 10 | 11 | 12



NV-FJ632EE
LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

12	13	14	15	16	17

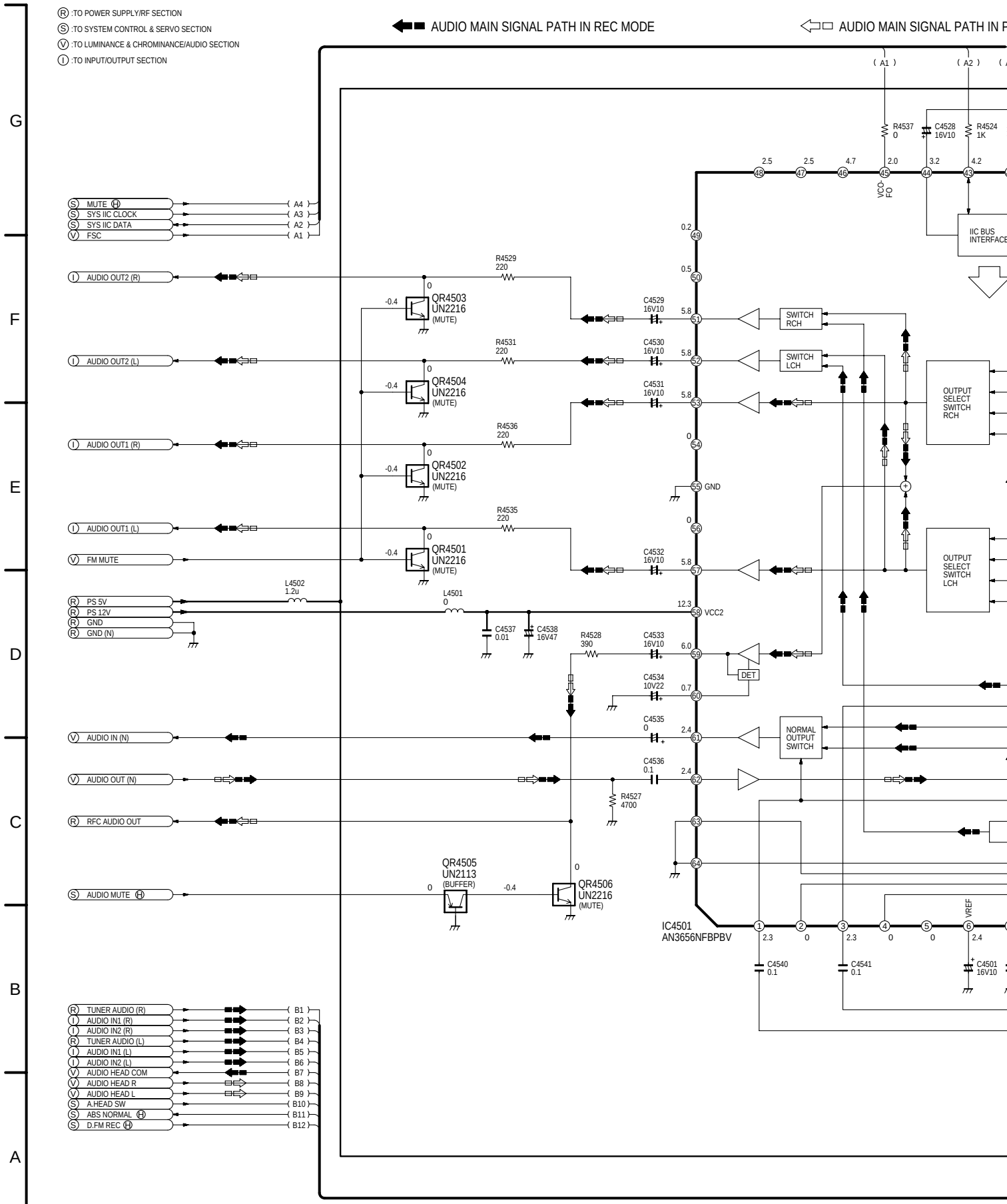


NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
LUMINANCE & CHROMINANCE/AUDIO SECTION SCHEMATIC DIAGRAM

18	19	20	21	22	23

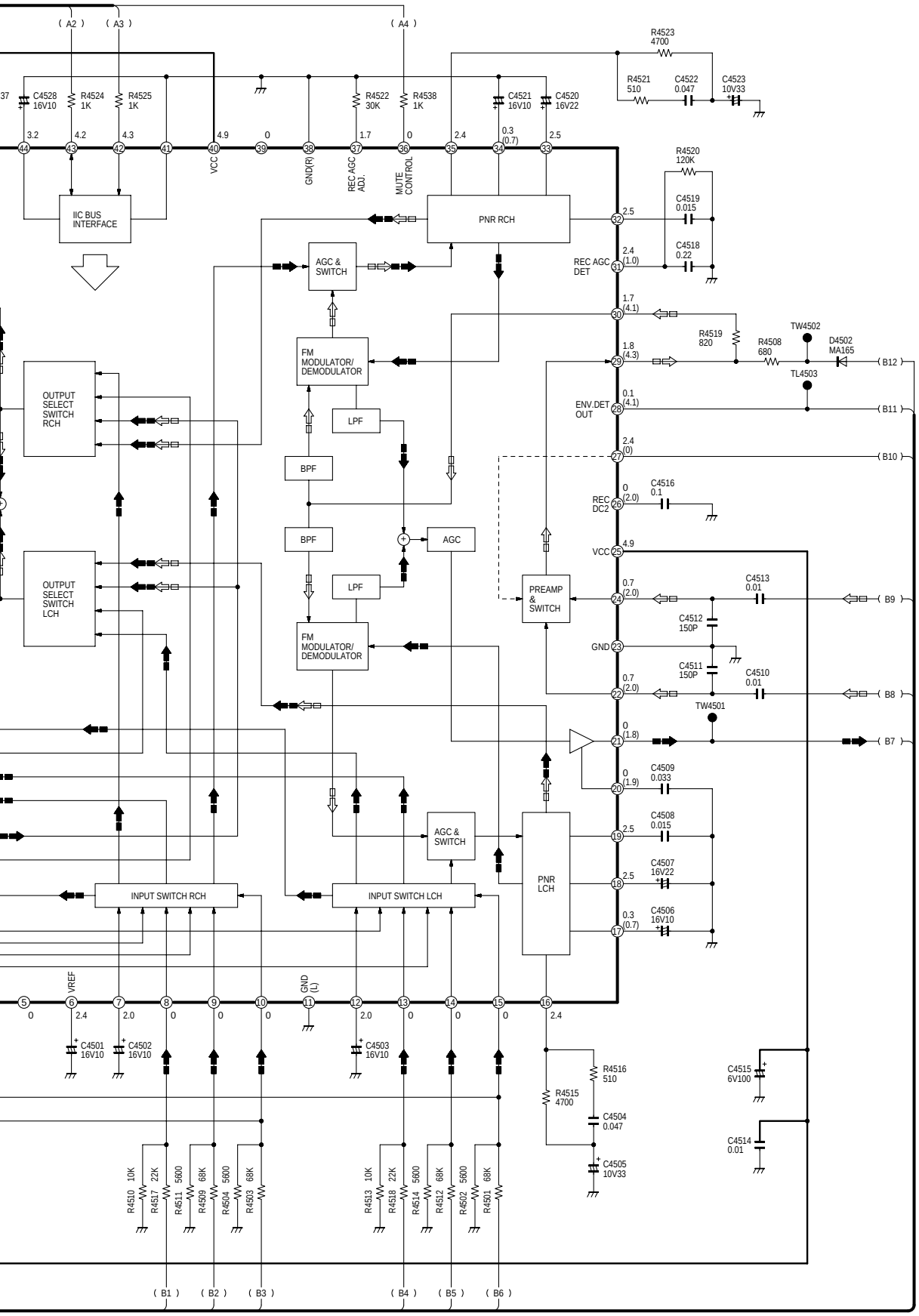
8.6. Hi-Fi AUDIO SECTION IN MAIN SCHEMATIC DIAGRAM



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE IN THE BRACKETS( )ON THIS DIAGRAM IS RECORD MODE WITH PAL COLOUR SIGNAL.(SP MODE)

THE MEASUREMENT MODE OF THE DC VOLTAGE OUT OF THE BRACKETS ON THIS DIAGRAM IS PLAYBA WITH PAL COLOUR SIGNAL.(SP MODE)

I SIGNAL PATH IN PLAYBACK MODE



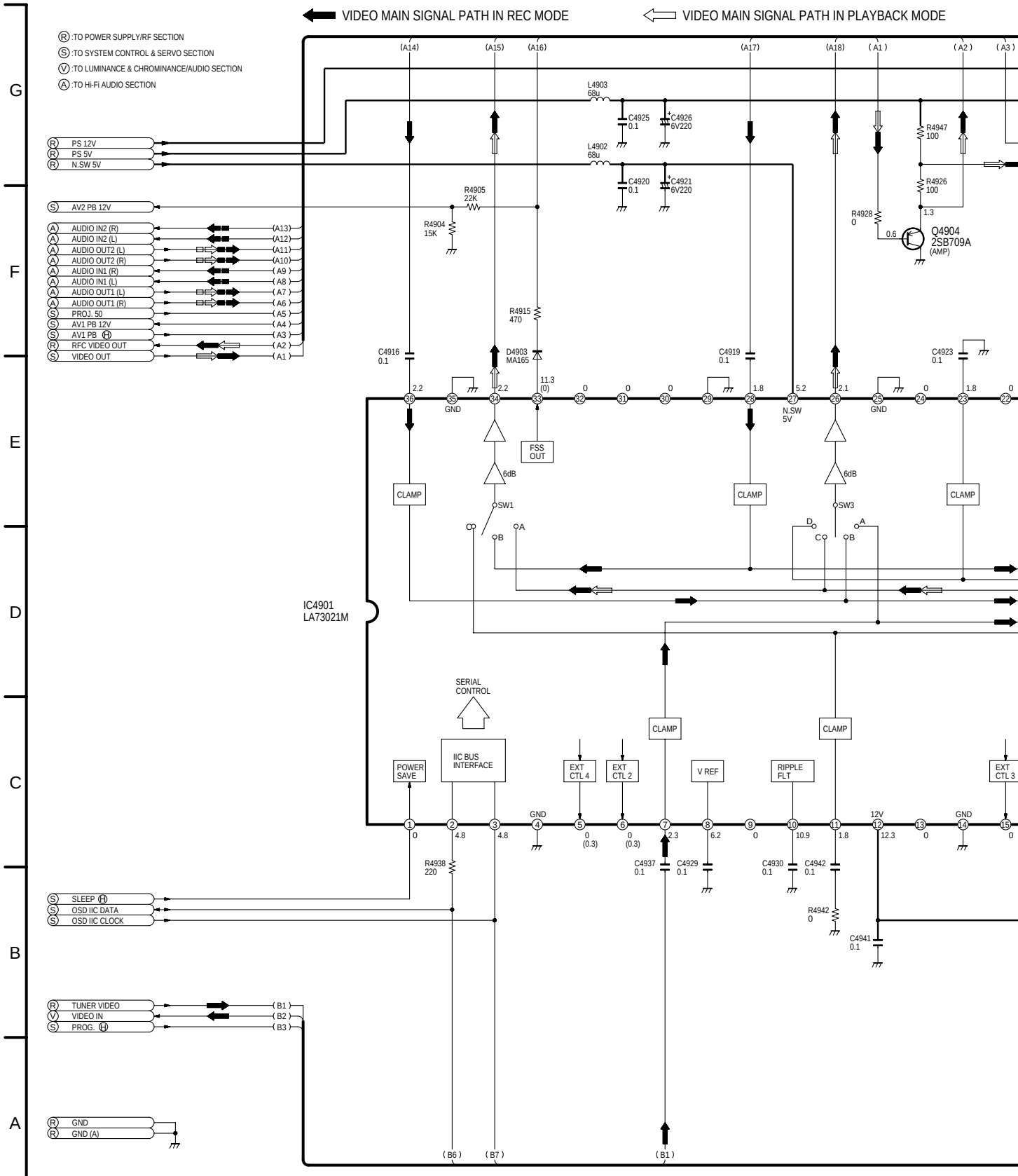
IS DIAGRAM IS PLAYBACK MODE

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
Hi-Fi AUDIO SECTION SCHEMATIC DIAGRAM

6	7	8	9	10

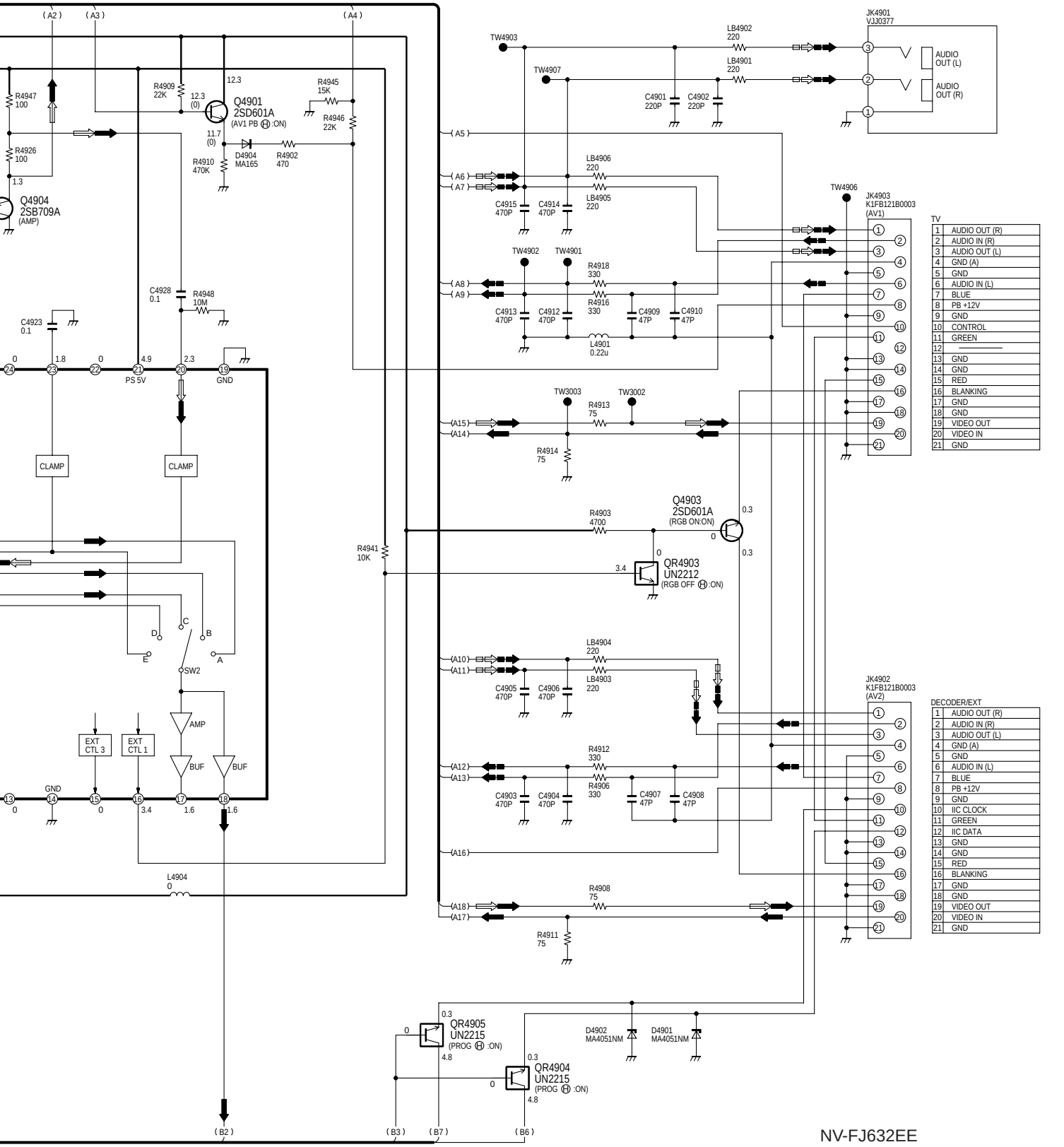
8.7. INPUT/ OUTPUT SECTION IN MAIN SCHEMATIC DIAGRAM



MODE

AUDIO MAIN SIGNAL PATH IN REC MODE

AUDIO MAIN SIGNAL PATH IN PLAYBACK MODE



TV

1	AUDIO OUT (R)
2	AUDIO IN (R)
3	AUDIO OUT (L)
4	GND (A)
5	GND
6	AUDIO IN (L)
7	BLUE
8	PB +12V
9	GND
10	CONTROL
11	GREEN
12	
13	GND
14	GND
15	RED
16	BLANKING
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN
21	GND

DECODER/EXT

1	AUDIO OUT (R)
2	AUDIO IN (R)
3	AUDIO OUT (L)
4	GND (A)
5	GND
6	AUDIO IN (L)
7	BLUE
8	PB +12V
9	GND
10	IIC CLOCK
11	GREEN
12	IIC DATA
13	GND
14	GND
15	RED
16	BLANKING
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN
21	GND

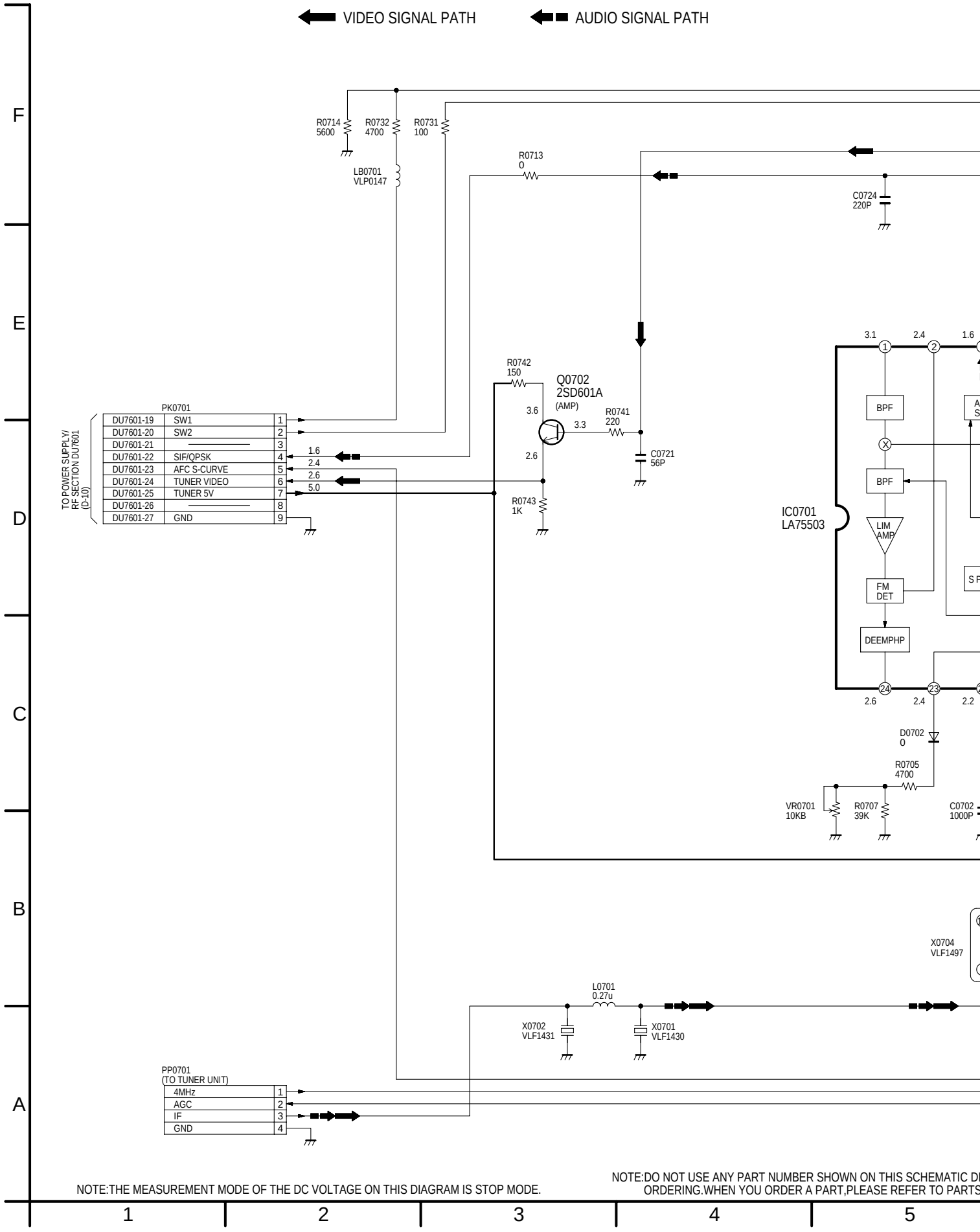
RACKETS ON THIS DIAGRAM IS PLAYBACK MODE

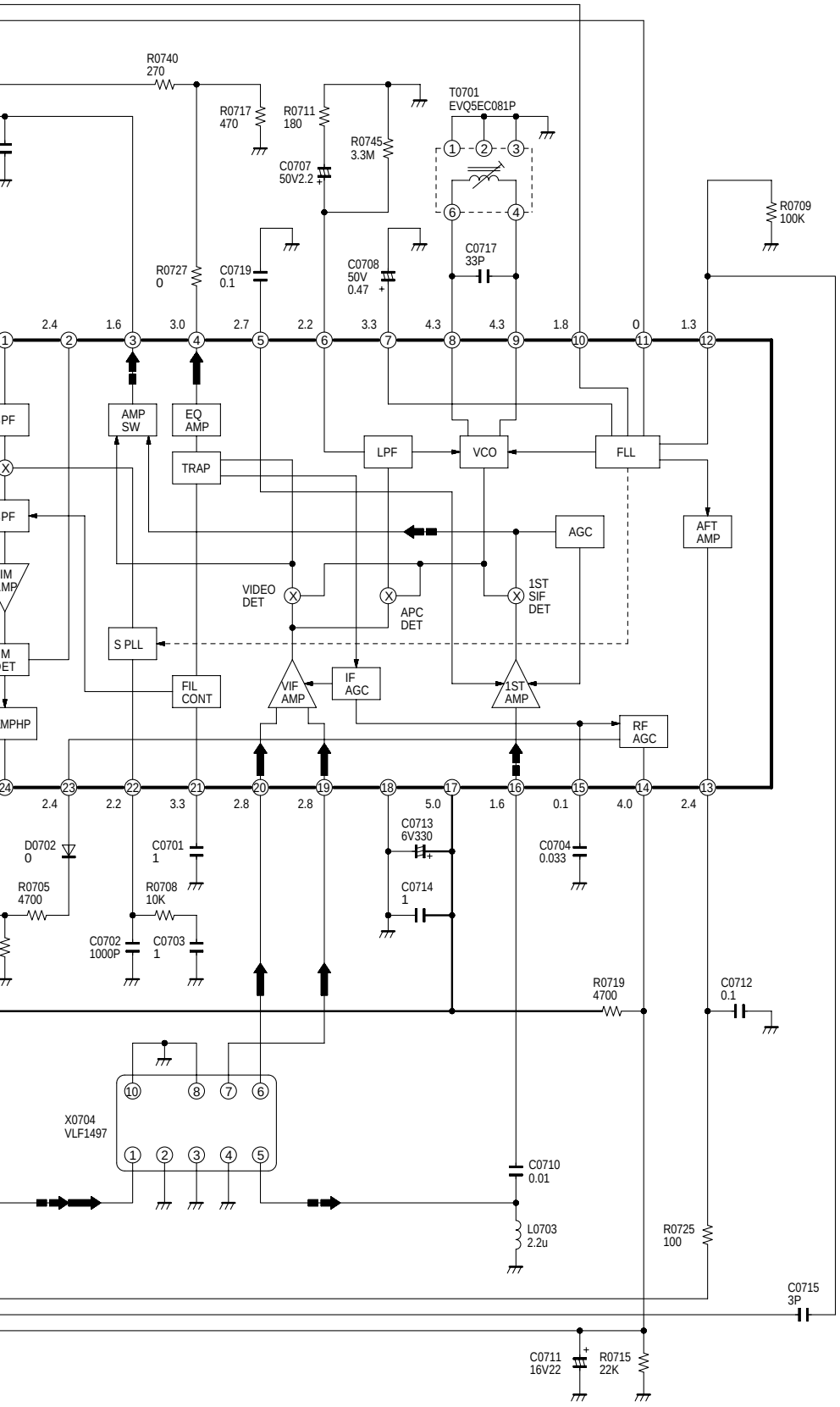
NOTE: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

NV-FJ632EE
INPUT/OUTPUT SECTION
SCHEMATIC DIAGRAM

6	7	8	9	10	11

8.8. TV DEMODULATOR PACK SCHEMATIC DIAGRAM



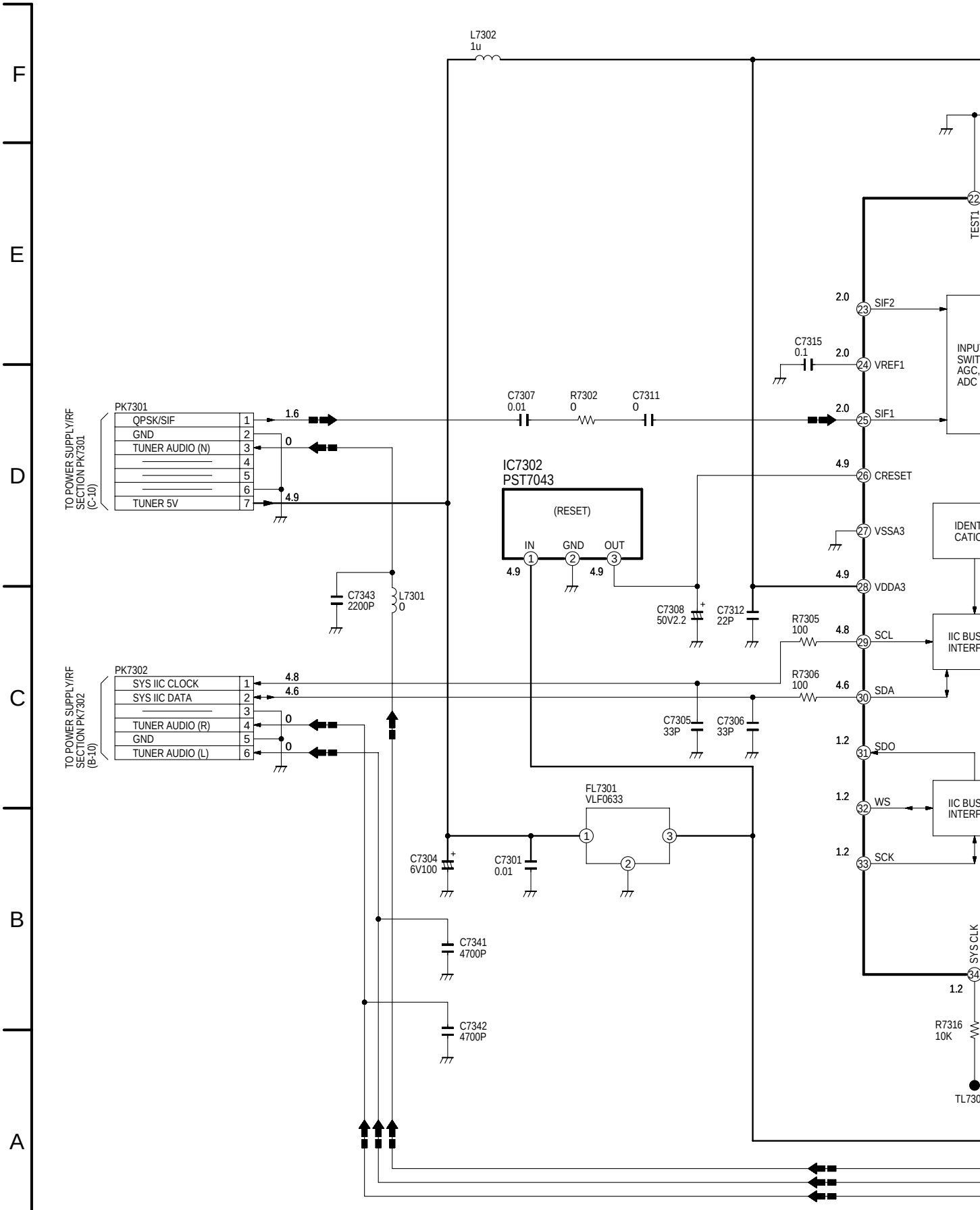


THIS SCHEMATIC DIAGRAM FOR
E REFER TO PARTS LIST.

NV-FJ632EE
TV DEMODULATOR PACK SCHEMATIC DIAGRAM

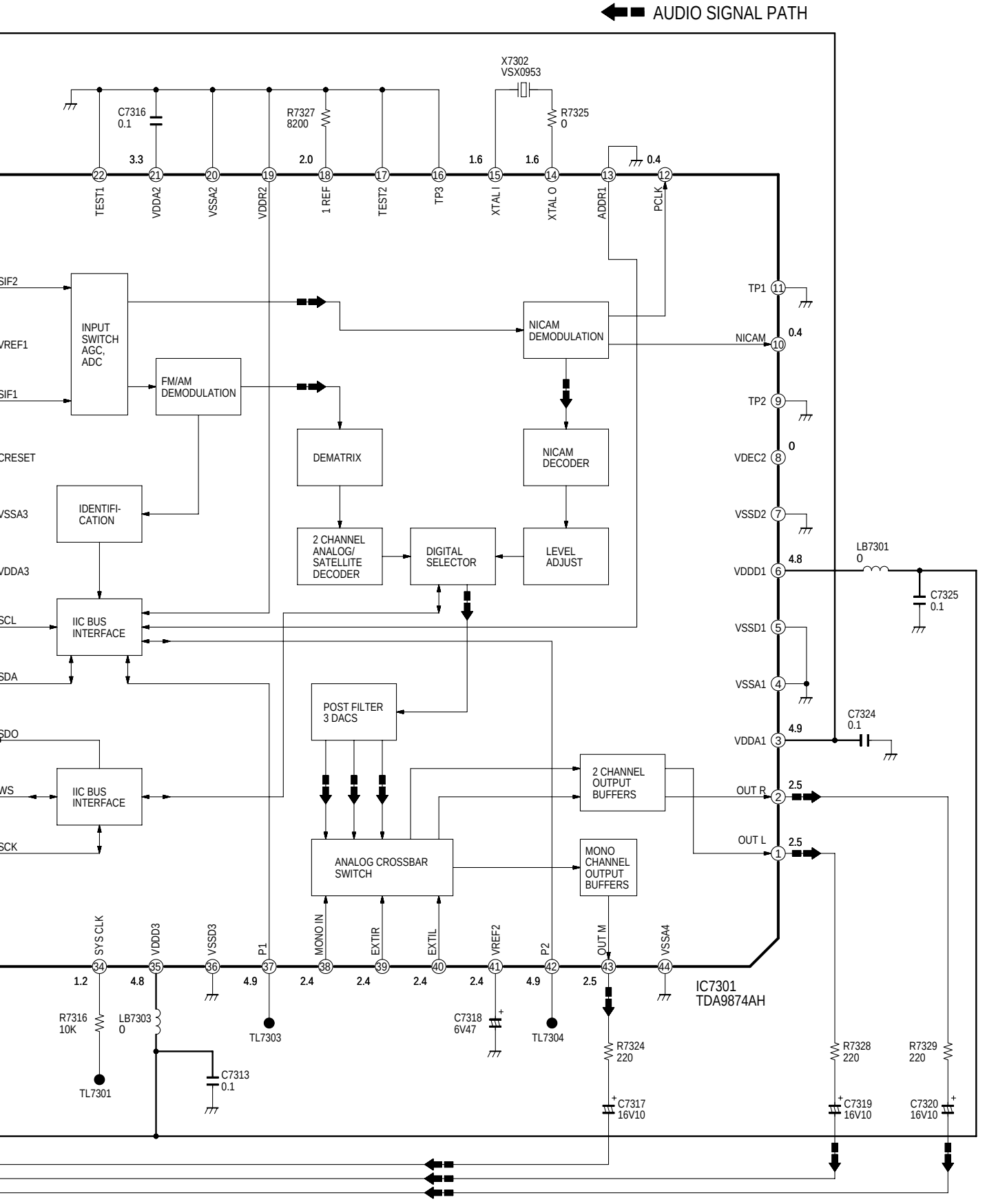
5	6	7	8

8.9. NICAM DECODER PACK SCHEMATIC DIAGRAM



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE: DO NOT USE ANY
ORDERING. WH

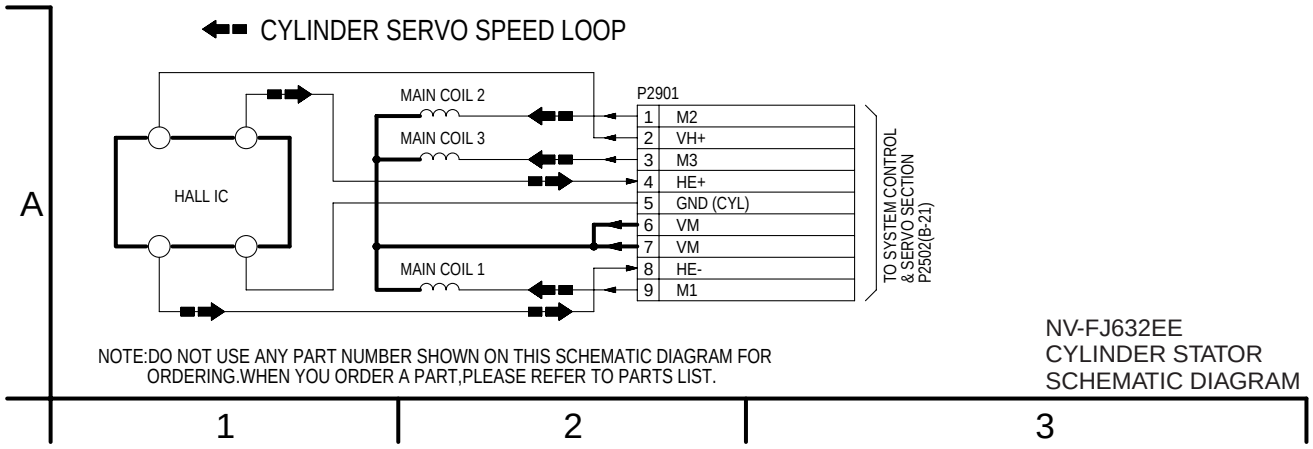


: DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING. WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

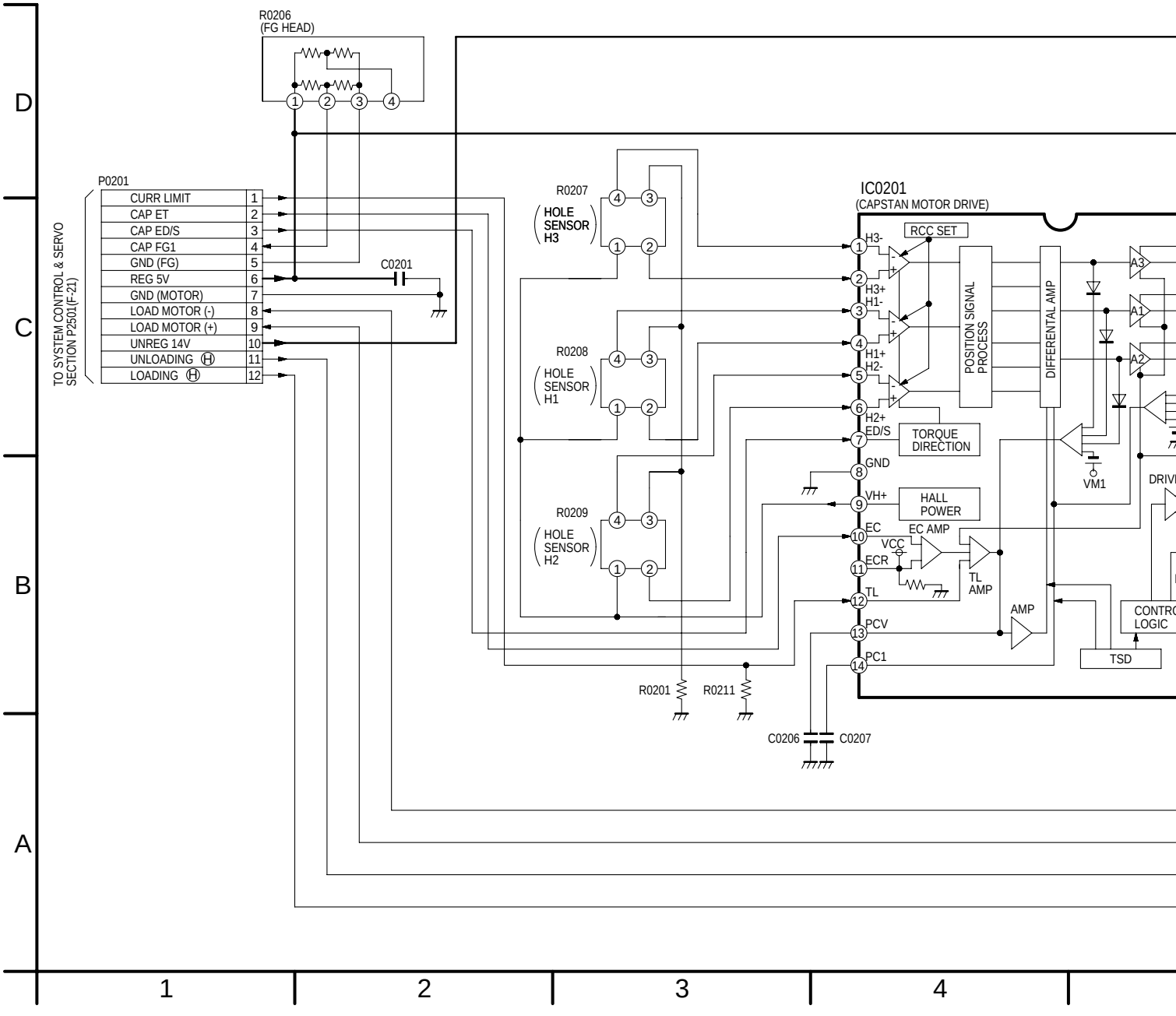
NV-FJ632EE
NICAM DECODER PACK SCHEMATIC DIAGRAM

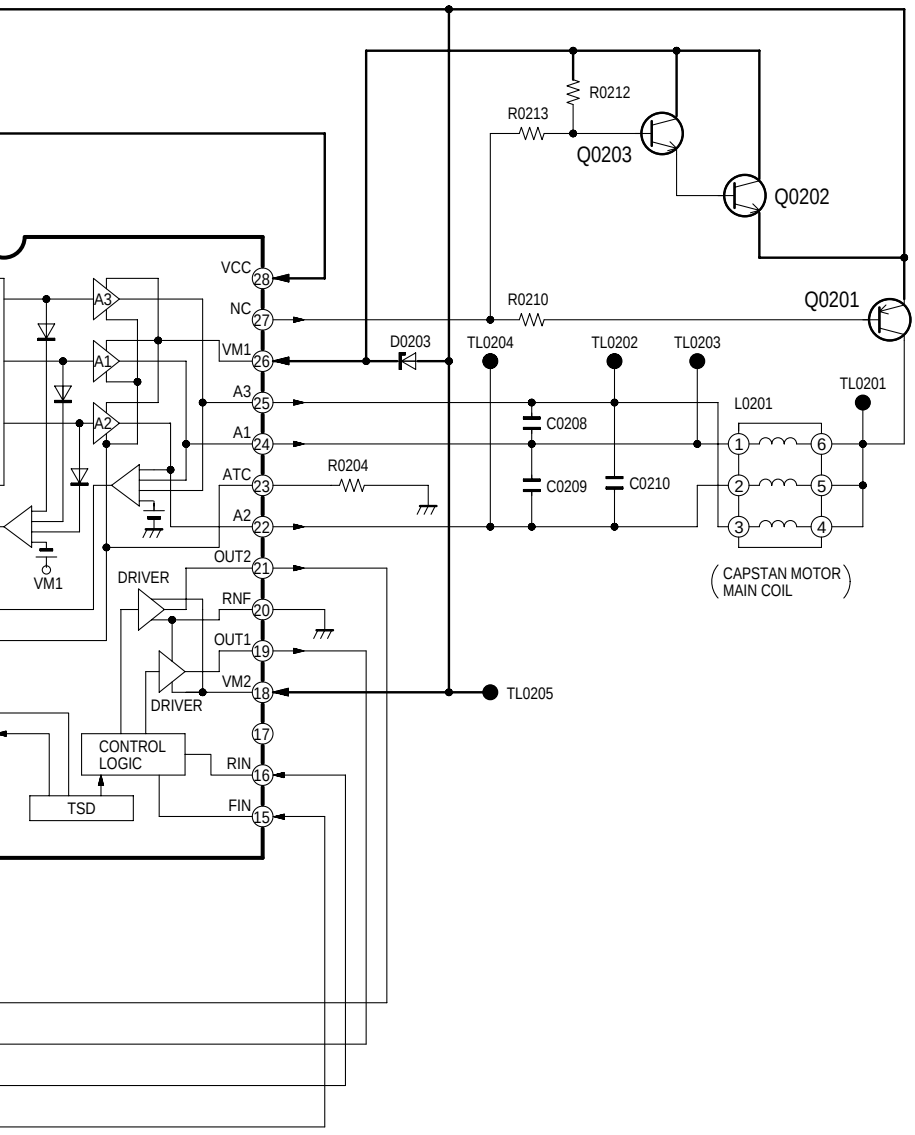
5 | 6 | 7 | 8

8.10. CYLINDER STATOR UNIT SCHEMATIC DIAGRAM



8.11. CAPSTAN UNIT SCHEMATIC DIAGRAM





NV-FJ632EE
CAPSTAN UNIT SCHEMATIC DIAGRAM

5 6 7